NACOmatic

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22 OCT 2009 to 19 NOV 2009

ALTERNATE MINS



INSTRUMENT APPROACH PROCEDURE CHARTS

IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS ABERDEEN PROVING GROUND, MD
PHILLIPS AAF (KAPG) NDB Rwy 22
VOR Rwy 22 VOR/DME Rwy 22
RNAV (GPS) Rwy 22
NA when control tower closed.
ABINGDON, VA VIRGINIA HIGHLANDSLOC Rwy 24
RNAV (GPS) Rwy 6
RNAV (GPS) Rwy 24 VOR/DME-B
NA when local weather not available.
Category C, 800-21/4, Category D, 800-21/2.
ANNAPOLIS, MD
LEERNAV (GPS)-A NA when local weather not available.
NA WHEN local weather not available.
BALTIMORE, MD
BALTIMORE-WASHINGTON INTL
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L ¹
BALTIMORE-WASHINGTON INTL
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ¹ILS, LOC, Categories A,B, 900-2; Category C,
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L ¹ ILS or LOC Rwy 28 ² VOR Rwy 10 ³
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼.
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2½; LOC, Category D, 800-2½. ³Categories A,B,1100-2;Category C,D 1100-3. MARTINSTATE
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2½; LOC, Category D, 800-2¾. ³Categories A,B,1100-2; Category C,D 1100-3.
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼. ³Categories A,B,1100-2; Category C,D 1100-3. MARTINSTATE
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼. ³Categories A,B,1100-2; Category C,D 1100-3. MARTIN STATE
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2½; LOC, Category D, 800-2½. ³Categories A,B,1100-2;Category C,D 1100-3. MARTINSTATE
BALTIMORE-WASHINGTON INTL THURGOOD MARSHALL ILS or LOC Rwy 15L¹ ILS or LOC Rwy 28² VOR Rwy 10³ ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾. ²ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼. ³Categories A,B,1100-2; Category C,D 1100-3. MARTIN STATE

NAME ALTERNATE MINIMUMS CHARLOTTESVILLE, VA CHARLOTTESVILLE- ALBEMARLEILS or LOC Rwy 312 RNAV (GPS) Y Rwy 2135 RNAV (GPS) Z Rwy 2135 RNAV (GPS) Z Rwy 2134
¹NA when control tower closed. ²ILS, Categories A,B, 800-2; Category C, 800-2½; Category D, 1000-3. LOC, Category C, 800-2½; Category D, 1000-3. ³NA when local weather not available. ⁴Category D, 1000-3. ⁵Category C, 800-2½; Category D, 1000-3.
COLLEGE PARK, MD COLLEGE PARK RNAV (GPS) Rwy 15 NA when local weather not available.
CULPEPER, VA CULPEPER RGNLLOC Rwy 4¹ RNAV (GPS) Rwy 4² RNAV (GPS) Rwy 22² VOR-A²
¹ NA when FBO closed. ² NA when local weather not available.
DANVILLE, VA DANVILLE RGNLVOR Rwy 20 Category C, 800-21/4; Category D, 800-21/2.
DUBLIN, VA NEW RIVER VALLEYVOR or GPS-A Category D, 800-21/4.
EASTON, MD EASTON/ NEWNAM FIELD ILS or LOC/DME Rwy 4 ¹

BLACKSBURG. VA

VIRGINIA TECH/MONTGOMERY EXECUTIVE RNAV (GPS) Rwy 12 RNAV (GPS) Rwy 30

NA when local weather not available.

NA when local weather not available. ¹ILS.LOC. NA when control tower closed.

RNAV (GPS) Rwy 4 RNAV (GPS) Rwy 15

RNAV (GPS) Rwy 22

RNAV (GPS) Rwv 33





RNAV (GPS) Rwy 35

NA when local weather not available.

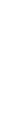
95	4
NAME ALTERNATE MINIMUMS EMPORIA, VA EMPORIA-	NAME ALTERNATE MINIMUMS LEONARDTOWN, MD ST. MARY'S COUNTY
GREENSVILLE RGNL RNAV (GPS) Rwy 15 NA when local weather not available.	RGNLRNAV (GPS) Rwy 11 RNAV (GPS) Rwy 29 NA when local weather not available.
FELKER AAF (KFAF)	NA when local weather not available.
FORT EUSTIS, VAORIG 08297 NDB Rwy 14 COPTER NDB Rwy 14 RNAV (GPS) Rwy 14 COPTER RNAV (GPS) Rwy 14	LOUISA, VA LOUISA COUNTY/ FREEMAN FIELD
NA when control tower closed.	LYNCHBURG, VA LYNCHBURG RGNL/PRESTON GLENN
FREDERICK, MD FREDERICK MUNIRNAV (GPS) Rwy 5 ¹² RNAV (GPS) Y Rwy 23 ¹ RNAV (GPS) Z Rwy 23 ³ ¹ Category D, 800-2½.	FIELDILS or LOC Rwy 4 ¹² RNAV (GPS) Rwy 4 ³ RNAV (GPS) Rwy 22 ³ VOR/DME Rwy 22 ⁴ VOR Rwy 4 ³
² NA when local weather not available. ³ Categories A,B,C,D, 800-2½.	¹ ILS,LOC, NA when control tower closed. ² ILS,Categories A,B, 800-2;Category C,900- 2½, Category D, 900-2¾. LOC,Category
GAITHERSBURG, MD MONTGOMERY COUNTY AIRPARK	C,900-2½, Category D, 900-2¾. Cot,oategory C,900-2½, Category D, 900-2¾. Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.
GALAX/HILLSVILLE, VA TWIN COUNTYRNAV (GPS) Rwy 1 RNAV (GPS) Rwy 19 NA when local weather not available.	MANASSAS, VA MANASSAS RGNL/HARRY P DAVIS FIELDILS or LOC Rwy 16L,700-2 RNAV (GPS) Rwy 16L NA when control tower closed.
GEORGETOWN, DE SUSSEX COUNTYRNAV (GPS) Rwy 4 RNAV (GPS) Rwy 22 NA when local weather not available.	MARION/WYTHEVILLE, VA MOUNTAIN EMPIRE RNAV (GPS) Rwy 26 NA when local weather not available. Category C, 800-21/4.
HAGERSTOWN, MD HAGERSTOWN RGNL-RICHARD A. HENSON FIELDILS or LOC Rwy 9¹ ILS or LOC Rwy 27¹ RNAV (GPS) Rwy 9 RNAV (GPS) Rwy 27 VOR Rwy 9	MARTINSVILLE, VA BLUE RIDGERNAV (GPS) Rwy 30 NA when local weather not available. Categories A,B, 1000-2; Categories C,D, 1000-3. MELFA, VA
NA when local weather not available. 1NA when control tower closed.	ACCOMACK COUNTY RNAV (GPS) Rwy 3 RNAV (GPS) Rwy 21 NA when local weather not available.
HOT SPRINGS, VA	
INGALLS FIELD	MIDDLETOWN, DE SUMMITRNAV (GPS) Rwy 17

LEESBURG, VA

234, Category D, 1000-3.

LEESBURG EXECUTIVE .. RNAV (GPS) Rwy 17 LPV, Category D, 700-2.

Categories, A, B, 1000-2; Category C, 1000-



ALTERNATE MINS



NAME	ALTERNATE MINIMUMS
NEWPORTNEWS	S, VA
NEWPORT NEWS/	/WILLIAMSBURG
INTL	ILS or LOC Rwy 712
	ILS or LOC Rwy 251
	LOC/DME Rwy 2012
	RNAV (GPS) Rwy 7 ²
	RNAV (GPS) Rwy 20 ²
¹ NA when control	tower closed

OCEAN CITY, MD

¹NA when local weather not available.

²NA when local weather not available.

²Category D, 800-21/4.

³Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

PETERSBURG, VA

DINWIDDIE COUNTY RNAV (GPS) Rwy 5 RNAV (GPS) Rwy 23 VOR Rwy 23

NA when local weather not available.

RICHLANDS, VA

TAZEWELL COUNTY LOC/DME Rwy 25 RNAV (GPS) Rwy 25

NA when local weather not available.

RICHMOND, VA

RICHMOND INTLILS or LOC Rwy 16 ILS, Categories A,B, 900-2, Category C, 900-2¾, Category D, 900-3. LOC, Categories A,B, 900-2, Category C, 900-2¾, Category D, 900-3.

RICHMOND/ASHLAND, VA

HANOVER
COUNTY MUNI RNAV (GPS) Rwy 16
VOR Rwy 161

NA when local weather not available.

¹Category C, 800-21/4, Category D, 800-21/2.

NAME ALTERNATE MINIMUMS

ROANOKE, VA

ROANOKE RGNL/WOODRUM

FIELDILS or LOC Rwy 33¹²
LDA Rwy 6²

VOR/NDB Rwy 33³ ¹ILS, Categories A,B, 800-2; Category C,

800-21/4; Category D, 800-21/2. LOC, Category C, 800-21/4; Category D, 800-21/2. Categories A,B, 1600-2; Categories C,D,

1600-3.

³Categories A,B, 1400-2; Categories C,D, 1400-3.

SALISBURY, MD

SALISBURY-OCEAN CITY
WICOMICO RGNL ILS or LOC Rwy 32

RNAV (GPS) Rwy 32 VOR Rwy 23¹

NA when local weather not available. Categories A, B, 1100-2; Categories C, D, 1100-3.

STAUNTON-WAYNESBORO-HARRISONBURG. VA

SHENANDOAH VALLEY

RGNLILS or LOC Rwy 5¹
NDB Rwy 5

RNAV (GPS) Rwy 5 RNAV (GPS) Rwy 23

NA when local weather not available. ¹ILS, Category D, 700-2.

SUFFOLK, VA

SUFFOLK EXECUTIVE RNAV (GPS) Rwy 4 RNAV (GPS) Rwy 7

NA when local weather not available.

WALLOPS ISLAND, VA

WALLOPS FLIGHT

FACILITYVOR/DME or TACAN Rwy 10

Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

ALTERNATE MINS

WASHINGTON, DC

WASHINGTON

DULLES INTLILS or LOC/DME Rwy 1C1 ILS or LOC/DME Rwy 1L1

ILS or LOC/DME Rwy 121

ILS or LOC/DME Rwy 19C1

ILS or LOC/DME Rwy 19R1 ILS or LOC Rwy 1R1

ILS or LOC Rwy 19L1

RNAV (GPS) Y Rwy 19R2

¹ILS, Categories A, B, C, D, 700-2.

²Category D, 800-21/4.

RONALD REAGAN

WASHINGTON NATIONAL ILS Rwy 11 LDA/DME Rwy 192

RNAV (GPS) RWY 333

ROSSLYN LDA Rwy 19, 1100-3

VOR/DME or GPS Rwy 154 VOR/DME or GPS Rwy 195

VOR Rwy 12 ¹ILS, Categories A, B,C, 700-2; Category D,

700-21/2. LOC, Category D, 800-21/4.

²Category D, 800-21/4.

3Categories A,B,C,D, 800-21/2.

⁴Categories A,B, 1000-2;Category C, 1000-23/4; Category D, 1000-3.

⁵Categories A,B, 1000-2; Categories C,D, 1000-3.

WEST POINT, VA

MIDDLE

PENINSULA RGNL RNAV (GPS) Rwv 10 VOR-A

NA when local weather not available.

WILMINGTON, DE

NEW CASTLE ILS or LOC Rwy 112 RNAV (GPS) Rwy 12 RNAV (GPS) Rwy 92

RNAV (GPS) Rwy 192 RNAV (GPS) Rwy 272 VOR Rwy 273

¹NA when contol tower closed.

²NA when local weather not available.

3Category D, 800-21/4.

WINCHESTER, VA

WINCHESTER RGNL RNAV (GPS) Rwy 14 RNAV (GPS) Rwy 32

VOR/DME-A

NA when local weather not available.

WISE, VA

LONESOME PINE RNAV (GPS) Rwy 612 RNAV (GPS) Rwy 243

¹NA when local weather not available.

²Category D, 800-21/4.

³Category C, 800-21/4; Category D, 900-23/4.

ANDREWS AFB (KADW), (CAMP SPRINGS) MD (09127 USAF)

RADAR - (E) 113.1T 124.0 128.35 257.2 286.6 301.5 316.7 335.5 360.8 379.2 **V** ELEV 280

				DH/	HAT/ HATh/	
ASR	RWY 1L ¹	GS/TCH/RPI	CAT AB	MDA-VIS 760/24	HAA 500	CEIL-VIS (500-1/2)
			С	760 /40	500	(500-3/4)
			D	760 /50	500	(500-1)
			E	760 /60	500	(500-11/4)
	19R⁴		AB	780 /24	507	(500-1/2)
			CD	780 /50	507	(500-1)
			E	780 /60	507	(500-11/4)
	19L²		ABC	720 /40	440	(500-3/4)
			DE	720 /50	440	(500-1)
	1R¹		ABC	760 /40	495	(500-3/4)
			D	760 /50	495	(500-1)
			E	760 /60	495	(500-11/4)
CIR ³	19L		Α	720 -1	440	(500-1)
			В	740 -1	460	(500-1)
			С	740-11/2	460	(500-1½)
			DE	840 -2	560	(600-2)
	19R		AB	780 -1	500	(500-1)
			С	780 -1½	500	(500-1½)
			DE	840 -2	560	(600-2)
	1L, 1R		AB	760 -1	480	(500-1)
			С	760-11/2	480	(500-1½)
			DE	840 -2	560	(600-2)

¹When ALS inop, increase CAT AB RVR 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1½ miles, CAT D vis to 1½ miles and CAT E vis to 1¾ miles. ²When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,CAT C RVR to 60 and vis to 1½ miles and CAT DE vis to 1½ miles. ³Circling not authorized W of Rwy 1L-19R. ⁴When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD vis to 1½.

DAVISON AAF (KDAA), VA (Ft. Belvoir) (Amdt 10A, 09211 USA) ELEV 73

RADAR¹ - (E) 118.85 119.95 248.5x 265.6 $\sqrt[r]{A}$ NA

RWY GS/TCH/RPI CAT PAR 32 3.0°/22/414 ABCD 14 3.0°/59/937 ABCD	DH/ MDA-VIS 333/40 635-2	HAT/ HATh/ HAA 265 575	CEIL-VIS (300-¾) (600-2)
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Opr 1100-2300Z++ wkd excld hol, R-IFF SIF svc not avbl.

NORFOLK NS (KNGU), (CHAMBERS FIELD), VA (09267 USN)
RADAR - (E) 119.2x 120.2x 279.525 322.525 335.8 353.55 \(\textstyre{V} \)

ELEV 7

PAR ¹	RWY 10 ²³ 28 ⁴	GS/TCH/RPI 3.0°/50/948 3.0°/36/682	CAT ABCDE ABCDE	DH/ MDA-VIS 117-1/4 265-3/4	HAT/ HATh/ HAA 100 250	CEIL-VIS (100-1/4) (300-3/4)
COPTER PAR ¹	10 ²³ 28 ⁴	3.0°/50/948 3.0°/36/682	COPTER COPTER	117-¼ 265-¾	100 250	(100-1/4) (300-3/4)
PAR W/O GS ¹	28 ⁵ 10 ⁶		ABCDE ABC DE	460-1 460- ³ / ₄ 460-1	445 443 443	(500-1) (500-3/4) (500-1)
ASR ¹	107		AB CD E	520-¾ 520-1 520-1¼	503 503 503	(600- ³ / ₄) (600-1) (600-1 ¹ / ₄)
	28 ⁶		ABC DE	460-1 460-11⁄4	445 445	(500-1) (500-1½)
CIR ASR ⁸⁹	10, 28		AB C DE	520 -11/ ₄ 520 -11/ ₂ 580 -2	503 503 563	(600-1½) (600-1½) (600-2)
CIR PAR W/O GS ⁸⁹	10, 28		AB C DE	520-11/4 520-11/2 580-2	503 503 563	(600-1½) (600-1½) (600-2)

¹No-NOTAM preventive maint Mon 1200-1800Z++. ²When ALS inop, increase vis CAT ABCDE to ½ mile. ³PAPI RRP and PAR RPI are not coincidental. ⁴When ALS inop, increase vis CAT ABCDE to 1 mile. ⁵When ALS inop, increase vis CAT ABCDE to 1½ miles. ⁵When ALS inop, increase vis CAT ABC to 1½ miles, CAT DE to 1½ miles. ¹When ALS inop, increase vis CAT AB to 1½ miles, CAT E to 1½ miles. °CAT E cir not authorized south of Rwy 10-28. ⁵Norfolk NS Heliport Ictd 1 NM NW, use caution in cir apch.

OCEANA NAS (KNTU), (APOLLO SOUCEK FIELD) VA (07214 USN)

RADAR - (E) 124.825 310.8 328.4 346.4 348.75 352.1 363.1 🔻

ELEV 23

PAR ⁶	RWY 5R1 23L1 5L 23R 14R 32L1	GS/TCH/RPI 3.0°/36/682 3.0°/42/798 3.0°/40/752 3.0°/44/842 3.0°/38/720 3.0°/41/785	CAT ABCDE ABCDE ABCDE ABCDE ABCDE ABCDE ABCDE	DH/ MDA-VIS 120-1/4 122-1/4 121-1/2 121-1/2 122-1/2 123-1/4	HAT/ HATh/ HAA 100 100 100 100 100	CEIL-VIS (100-½) (100-½) (100-½) (100-½) (100-½) (100-½)
PAR SIDESTEP ⁷	32R 14L 5L 23L 23R		AB C DE AB C DE ABC DE ABC DE ABC DE ABC DE	360-1½ 360-1½ 360-2 320-1 320-1½ 320-2 420-1½ 420-2 460-1½ 460-2 460-1½	339 339 339 300 300 300 399 399 438 438 439	(400-1½) (400-1½) (400-2) (300-1) (300-1½) (300-2) (400-1½) (500-1½) (500-1½) (500-1½) (500-2)
PAR W/O GS ⁷	5R ² 5L 32L ⁴ 23L ³ 14R 23R		ABCD E ABCD E ABCDE ABC DE ABCDE ABC DE	420-3/4 420-1 420-11/4 420-11/2 360-3/4 460-3/4 460-11/4 460-11/4 460-11/2	400 400 399 399 337 438 438 278 439	(400-3/4) (400-1) (400-11/4) (400-11/2) (400-3/4) (500-3/4) (500-1) (300-11/4) (500-11/2)
PAR W/O GS SIDESTE	5L 32R 14L 23L 23R		AB C DE	420-11/4 420-11/2 420-2 360-11/4 360-11/2 360-2 320-11/4 320-11/2 320-2 460-11/4 460-11/2 460-11/4 460-11/2 460-11/2	399 399 339 339 339 300 300 438 438 438 438 439	(400-11/4) (400-11/2) (400-2) (400-11/4) (400-11/2) (400-2) (300-11/4) (300-11/2) (300-2) (500-11/4) (500-2) (500-11/2) (500-11/2) (500-11/2)

HAT/

OCEANA NAS (KNTU)(CON'T), (APOLLO SOUCEK FIELD) VA (07214 USN)

				DH/	HATh/	
	RWY	GS/TCH/RPI	CAT	MDA-VIS	HAA	CEIL-VIS
ASR	5R⁵	GS/TCH/KPI	AB	420-½	400	(400-½)
ASIN	JIX		CD	420-72	400	(400- ³ / ₄)
			E	420-74 420-1	400	(400-74)
	32L ⁶		AB	440-1/2	417	(500-1/2)
	JZL		CD	440-34	417	(500-3/4)
			E	440-74 440-1	417	(500-74)
	23L ⁶		AB	460-1/2	438	(500-1)
	ZJL		C	460-72	438	(500-3/4)
			DE	460-74 460-1	438	(500-74)
	14R		AB	460-1	438	(500-1)
	1711		C	460-11/4	438	(500-1)
			DE			,
			DE	460-11/2	438	(500-1½)
ASR	5L		AB	420 -1	399	(400-1)
SIDESTEP		С	420 -1½	399	(400-1½)	
			DE	420 -2	399	(400-2)
	32R		AB	440 -1	419	(500-1)
			С	440-11/2	419	(500-1½)
			DE	440 -2	419	(500-2)
	14L		AB	460 -1	440	(500-1)
			С	460-11/2	440	(500-1½)
			DE	460 -2	440	(500-2)
	23R		AB	460 -1	439	(500-1)
			С	460-11/2	439	(500-1½)
			DE	460 -2	439	(500-2)
CIR	All Rwy		AB	480 -1	457	(500-1)
ASR			С	480 -1½	457	(500-1½)
			D	580 -2	557	(600-2)
			E	620 -2	597	(600-2)
CID	AII D		A D	400 41/	457	(500,41/)
CIR PAR W/O G	All Rwy		AB C	480-11/4	457 457	(500-11/4)
PAR W/O G	5			480-1½	457	(500-1½)
			D	580-2½	558	(600-21/4)
			E	620 -21/4	598	(600-21/4)

 $^1\text{When ALS inop, increase vis CAT ABCDE to <math display="inline">\frac{1}{2}$ When ALS inop, increase vis CAT ABCD to $\frac{1}{2}$ miles, CAT E to $\frac{1}{2}$ miles. $^3\text{When ALS inop, increase vis CAT ABC to <math display="inline">\frac{1}{2}$ miles. $^4\text{When ALS inop, increase vis CAT ABCDE to <math display="inline">\frac{1}{2}$ miles. $^4\text{When ALS inop, increase vis CAT ABCDE to <math display="inline">\frac{1}{2}$ miles. $^6\text{When ALS inop, increase vis CAT ABC to 1 mile, CAT D to <math display="inline">\frac{1}{2}$ miles, CAT E to $\frac{1}{2}$ miles. $^6\text{When ALS inop, increase vis CAT AB to 1 mile, CAT C to <math display="inline">\frac{1}{2}$ miles, CAT DE to $\frac{1}{2}$ miles. $^7\text{No-NOTAM}$ preventive maintenance TUE $\frac{1}{2}$ miles. $\frac{1}{$

PATUXENT RIVER NAS (KNHK), (TRAPNELL FLD), MD (09267 USN) ELEV 39

RADAR -	RADAR - (E) 120.05 121.0 135.025 250.3 281.8 301.2 305.2 318.8 348.0 362.6 V							
				DA/	HAT/ HATh/			
	RWY	GS/TCH/RPI	CAT	MDA-VIS	HAA	CEIL-VIS		
PAR ¹	6 ²	3.0°/46/971	ABCDE	139-1/4	100	(100-1/4)		
	24	3.0°/43/805	ABCDE	120-1/2	100	(100-1/2)		
	14	3.0°/37/735	ABCDE	127-1/2	100	(100-1/2)		
	32	3.0°/48/892	ABCDE	268 -1	250	(300-1)		
PAR W/O	6⁴		ABCD	360-1/2	321	(400-1/2)		
GS			E	360-3/4	321	(400-3/4)		
	14		ABCDE	340-11/4	313	(400-11/4)		
	24		ABCDE	320-11/4	300	(400-11/4)		
	32		ABCDE	340-11/4	322	(400-11/4)		
ACD	1.1		ARC	200.4	252	(400.4)		
ASR	14		ABC	380 -1	353	(400-1)		
	20		DE	380-11/4	353	(400-11/4)		
	32		ABC	400-1	382	(400-1)		
	6 ³		DE	400-11/4	382	(400-11/4)		
	6°		AB	500-½	461	(500-1/2)		
			С	500-34	461	(500-3/4)		
			D	500-1	461	(500-1)		
			E	500-11/4	461	(500-11/4)		
	24		AB	440-1	420	(500-1)		
			CD	440-11/4	420	(500-11/4)		
0.105		_	E	440-11/2	420	(500-1½)		
CIR⁵	6-24, 14-3	2	A	540 -1	501	(600-1)		
			В	560 -1	521	(600-1)		

E 640-2 $^{1/4}$ 601 (700-2 $^{1/4}$)

1PAR No-NOTAM preventive maint period Wed 1300-1700Z++. $^{1/4}$ When ALS inop, increase Cat ABCDE vis to $^{1/4}$ mile. $^{1/4}$ When ALS inop, increase Cat AB vis to 1 mile, Cat C vis to 1 $^{1/4}$ miles, Cat D vis to 1 $^{1/4}$ miles. $^{1/4}$ miles. $^{1/4}$ miles. $^{1/4}$ whiles. $^{1/4}$ whiles.

560-11/2

600-2

521

561

 $(600-1\frac{1}{2})$

(600-2)

С

D

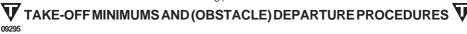
QUANTICO MCAF (KNYG), (TURNER FIELD) VA (09295 USN)

ELEV 11

RADAR¹ - 120.925 351.95 353.65 363.15 🔻

D 4 D22	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ <u>HAA</u>	CEIL-VIS
PAR ²³	2	3.0°/35/670	ABCD	262 -1	252	(300-1)
PAR W/O GS ²	2		ABCD	400-11/4	390	(400-11/4)
ASR ²	2		AB C	560-1 560-1½	550 550	(600-1) (600-1½)
			D	560-134	550	(600-172)
CIR PAR or	2		A	500-11/4	490	(500-11/4)
PAR W/O GS⁴			B C	540-1¼ 540-1½	530 530	(600-1½) (600-1½)
			D	700-21/4	690	(700-21/4)
CIR ⁴	2		AB C	560-1 560-1½	550 550	(600-1) (600-1½)
			D	700-21/4	690	(700-1/2)

¹GCA avbl daily during published field opr hr. Ctc twr for freq asgn. ²Procedure NA at night when VGSI inop. ³PAR military use only in other than VFR. ³Circling not authorized W of Rwy 2-20.



INSTRUMENT APPROACH PROCEDURE CHARTS

FIFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in

avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSI

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military takeoff minima, refer to appropriate service directives.

ΝΔΜΕ TAKE-OFF MINIMUMS

ABINGDON, VA

VIRGINIA HIGHI ANDS

TAKE-OFF MINIMUMS: Rwys 6, 24, 300-1 DEPARTURE PROCEDURE: Climb straight ahead to 5000 when departing NE, or 4000 when departing SW. before proceeding on course.

ANDREWS AFB/NAF (KADW)

CAMP SPRINGS, MD. 09127 TAKE-OFF OBSTACLES: Rwv 1L, trees 2972' to 3085' from DER, 765' to 906' right of centerline, 93' AGL/355' MSL, Rwv 1R, trees 1512' from DER, 856' right of centerline, 74' AGL/336' MSL: trees 2254' from DER. 645' left of centerline, 93' AGL/355' MSL; trees 2629' from DER, 1095' left of centerline, 93' AGL/355' MSL: trees 2882' from DER, 364' left of centerline, 104' AGL/ 362' MSL, Rwv 19L, terrain 267' from DER, 580' left of centerline, 261'MSL; trees 2650' to 2874' from DER, 946' to 1113' right of centerline, 91' AGL/334' MSL. Rwv 19R. trees 2650' to 2873' from DER, 887' to 1054' left of centerline, 91' AGL/334' MSL: tower 4630' from

DER, 1664' right of centerline, 108' AGL/377' MSL.

NAME TAKE-OFF MINIMUMS ANNAPOLIS, MD

TAKE-OFF MINIMUMS: Rwv 30, 300-1 or std. with a min. climb of 410' per NM to 400.

DEPARTURE PROCEDURE: Rwv 12. climb runwav heading to 700 before proceeding on course. Rwy 30, climb runway heading to 1000 before proceeding right on course. Climb runway heading to 700 before proceeding left on course.

NOTE: Rwv 12, cross departure end of runway at or above 35' AGL/66' MSL. Rwv 30, trees, 1433' from departure end of runway, 85' left of centerline. 100' AGL/139' MSL. Cross departure end of runway at or above 35' AGL/66' MSL.



BAI TIMORE, MD BAI TIMORE/WASHINGTON INTI THURGOOD

MARSHALL TAKE-OFF MINIMUMS: Rwy 4, 300-11/2 or std. w/min.

climb of 210' per NM to 500. DEPARTURE PROCEDURE: Rwv 4, climb heading

044° to 800 before proceeding on course. Rwy 28, climb heading 285° to 900 before proceeding on course Rwy 33L, climb heading 320° to 2000 before proceeding on course, Rwy 33R, climb heading 005° to 1900 before proceeding on course NOTE: Rwv 4, rod on lighted pole 1921 from departure

end of runway, 329' right of centerline, 58' AGL/197' MSL. Light on pole 2177' from departure end of runway. 294' left of centerline, 58' AGL/197' MSL. Light on pole 1755' from departure end of runway 482' right of centerline, 47' AGL/186' MSL. Tree 2370' from departure end of runway, 481' right of centerline, 60' AGL/199' MSL. Tank 6635' from departure end of runway, 2265' right of centerline, 122' AGL/316' MSL. Tank 7534' from departure end of runway 2274' left of centerline, 173' AGL/338' MSL. Rwv 10, building 52' from departure end of runway, 319' left of centerline, 13' AGL/133' MSL. Rwv 15L, multiple trees beginning 648' from departure end of runway, 617' left of centerline, up to 68' AGL/167' MSL. Light on pole 921' from departure end of runway, 618' left of centerline, 62' AGL/161' MSL. Rwv 15R, multiple trees beginning 1144' from departure end of runway, 740' right of centerline, up to 53' AGL/ 172' MSL. Rwy 22, terrain beginning 111' from departure end of runway, 29' right of centerline, up to 171' AGL. Terrain 365' from departure end of runway. 137' left of centerline, 158' MSL, Rwv 28, tree 1392' from departure end of runway, 736' left of centerline, 77' AGL/176' MSL. Rwy 33L, building 4693' from departure end of runway, 874' right of centerline, 127' AGL/266' MSL. Tree 2250' from departure end of runway, 843' right of centerline, 66' AGL/205' MSL, Microwave antenna on building, 4725' from departure end of runway. 907' right of centerline, 126' AGL/265' MSL. Fence 203' from departure end of runway, 517' right of centerline, 9' AGL/140' MSL. Rwv 33R, numerous trees beginning 2925' from departure end of runway, 321' left of centerline, up to 70' AGL/289' MSL. Numerous trees beginning 975' from departure end of runway, 116' right of centerline, up to 63' AGL/262' MSL. Light on pole 2384' from departure end of runway, 837' right of centerline, 55' AGL/254' MSL, Building 998' from departure end of runway, 654' left of centerline, 24' AGL/ 183' MSL. Light on pole 3869' from departure end of runway, 603' left of centerline, 72' AGL/251' MSL, Light on pole 2736' from departure end of runway, 247' right of centerline, 17' AGL/216' MSL, Pole 3781' from departure end of runway, 370' right of centerline, 40' AGL/242' MSL. Signal 2453' from departure end of

runway, 904' left of centerline, 45' AGL/204' MSL.

BALTIMORE, MD (CON'T) **MARTIN STATE**

TAKE-OFF MINIMUMS: Rwv 15, 800-2 or std. with a

min, climb of 300' per NM to 1000, Rwy 33, 1300-2 or std, with a min, climb of 340' per NM to 1700'. DEPARTURE PROCEDURE: Rwv 15, climb runway

heading to 1000 before proceeding on course; or when directed by ATC, climbing right turn heading 190° to 1000 before proceeding on course.

NOTE: Rwv 15, trees 1960' from departure end of runway 684' left of centerline, 78' AGL/88' MSL, trees 3395' from departure end of runway, 585' left of centerline, 92' AGL/102' MSL. Rwv 33, pole 1553' from departure end of runway, across centerline, 68' AGL/90' MSL. Trees 2342' from departure end of runway, across centerline 86' AGL/108' MSL.

BLACKSBURG. VA

VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

AMDT 4 08073 (FAA)

TAKE-OFF MINIMUMS: Rwv 12, 400-11/4 or std. w/min. climb of 563' per NM to 2700

DEPARTURE PROCEDURE: Rwy 12, climbing right turn direct PSK VORTAC to 3500 before proceeding on course, Rwv 30, climbing left turn direct PSK VORTAC to 4100 before proceeding on course.

NOTE: Rwv 12, bushes and trees beginning 275' from departure end of runway, 154' left of centerline, up to 100' AGL/2239' MSL. Trees beginning 5108' from departure end of runway, 1363' left of centerline, up to 100' AGL/ 2499' MSL. Trees beginning 3165' from departure end of runway, 1324' right of centerline up to 100' AGL/2279' MSL. Rwy 30, trees beginning 90' from departure end of runway, 461' left of centerline, up to 46' AGL/2140' MSL. Fence and obstruction light pole beginning 546' from departure end of runway, 161' left of centerline, up to 12' AGL/2139 MSL, Vehicle on road beginning 567 from departure end of runway, 310' left of centerline, 24' AGL/ 2137' MSL, Trees beginning 2080' from departure end of runway, 788' left of centerline, up to 100' AGL/2201' MSL. Fence, 861' from departure end of runway, 52' right of centerline, up to 12' AGL/2135' MSL, Trees beginning 539' from departure end of runway, 326' right of centerline, up to 40' AGL/2153' MSL, Trees beginning 1328' from departure end of runway, 117' right of centerline, up to 100' AGL/2182' MSL terrain beginning 330' from departure end of runway, 366' right of centerline, up to 2138' MSL pole and antenna beginning 1149' from departure end of runway, 391' right

of centerline, up to 40' AGL/2151' MSL.



BLACKSTONE, VA ALLEN C PERKINSON BLACKSTONE AAF

TAKE-OFF MINIMUMS: Rwv 1, 1000-2 or std. with a

min. climb of 280' per NM to 1700. Rwv 4. 1000-2 or std. with a min_climb of 220' per NM to 1700 Rwv 19, NA DEPARTURE PROCEDURE: Rwv 1, climb heading 010° to 1700 before proceeding on course. Rwv 4. climb heading 039° to 1700 before proceeding on course.

Rwy 22, climb heading 208° to 900 before proceeding on course Rwy 22, climb heading 208° to 900 before proceeding on course.

NOTE: Rwv 4.50' AGL tree. 150' from departure end of runway, 450' right of centerline, Rwy 22, 66' AGL tree. 175' from departure end of runway, 450' left of centerline. Do not fly over ammunition dump 1.1 NM SW of Rwy 4.

BRIDGEWATER. VA

BRIDGEWATER AIRPARK

TAKE-OFF MINIMUMS: Rwv 15, 700-1, Rwv 33, 700-2, DEPARTURE PROCEDURE: All aircraft climb in VBW holding pattern (SW, right turns, 035° inbound) to 4000 before proceeding on course.

BROOKNEAL.VA

BROOKNEAL/CAMPBELL COUNTY

NOTE: Rwv 6, multiple trees beginning 569' from departure end of runway, 252' right of centerline, up to 100' AGL/689' MSL, Rwv 24, multiple trees beginning 334' from departure end of runway, 286' right of centerline, up to 100' AGL/679' MSL. Multiple trees beginning 1377' from departure end of runway, 850' left of centerline, up to 100' AGL/719' MSL.

CAMBRIDGE. MD

CAMBRIDGE-DORCHESTER TAKE-OFF MINIMUMS: Rwv 34. 300-1.

CAMP PEARY LNDG STRIP (KW94)

WILLIAMSBURG, VA 08213

TAKE-OFF OBSTACLES: Rwv 5: trees and multiple transmission lines 120' from DER, 184' left of centerline up to 95' AGL/126' MSL. Trees and multiple transmission lines 162' from DER, 257' right of centerline up to 100' AGL/132' MSL. Rwv 23: trees and multiple transmission lines 1891' from DER, 69' left of centerline up to 95' AGL/136' MSL. Multiple trees and transmission lines 537' from DER, 437' right of centerline up to 110' AGL/151' MSL.

CHARLOTTESVILLE, VA CHARLOTTES/ILLE-ALBEMARLE (CHO)

AMDT 9 09295 (FAA)

TAKE-OFF MINIMUMS: Rwv 3, std. w/min.climb.of 323' ner NM to 1500, or 2200-3 for climb in visual conditions DEPARTURE PROCEDURE: Rwv 3. climb via heading 030° to 1500 then climbing right turn to 4000 direct GVE VORTAC before proceeding on course, or for climb in visual conditions: cross Charlottesville-Albemarle airport at or above 2700 before proceeding on course. Rwv 21. climb via heading 210° to 1400, then climbing left turn to 4000 direct GVE VORTAC before proceeding NOTE: Rwv 3, pole 97' from DER, 476' right of centerline.

27' AGL/627' MSL. Trees beginning 836' from DER, 597' right of centerline, up to 100' AGL/1216' MSL. Tower 2.3 NM from DER, 3443' right of centerline, 107' AGL/1167' MSL. Terrain beginning 2.2 NM from DER. 3183' right of centerline, up to 1116' MSL.

CHASE CITY, VA

CHASE CITY MUNI

NOTE: Rwv 18, trees beginning 191' from departure end of runway, 116' left of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 327' from departure end of runway, 133' right of centerline, up to 100' AGL/599' MSL. Rwv 36, trees beginning 164' from departure end of runway, 154' right of centerline, up to 100' AGL/649' MSL. Trees beginning 470' from departure end of runway, 124' left of centerline, up to 100' AGL/649' MSL.

CHURCHVILLE, MD

HARFORD COUNTY

TAKE-OFF MINIMUMS: Rwv 28, 300-1 or std. with a min, climb of 400' per NM to 600.

NOTE: Rwy 28, 100' terrain/trees 1150' from departure end of runway.

CLARKSVILLE. VA

MARKS MUNI

TAKE-OFF MINIMUMS: Rwy 4, 600-1 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: Rwy 22, climb runway heading to 1900 before turning.

CLINTON, MD

WASHINGTON EXECUTIVE/HYDE FIELD (W32)

ORIG 08045 (FAA)

NOTES: Rwy 5, Vehicle on road beginning 20' from departure end of runway, on centerline, up to 15' AGL/ 261'MSL, Rwv 23. Vehicle on road 23' from departure end of runway, 329' left of centerline, 15' AGL/260' MSL.



COLLEGE PARK, MD COLLEGE PARK (CGS)

AMDT 3B 08157 (FAA)

TAKE-OFF MINIMUMS: Rwv 15, 400-21/2 or std. w/min.

climb of 486' per NM to 600. Rwy 33, 400-21/2 or std. w/ min. climb of 433' per NM to 600. DEPARTURE PROCEDURE: Rwy 15, climb heading

149° to 600 before proceeding on course. Rwv 33, climb heading 329° to 600 before proceeding on course

NOTE: Rwv 15, trees beginning 2799' from departure end of runway, 570' left of centerline, up to 100' AGL/259' MSI Antenna 1 1 NM from departure end of runway 149' left of centerline, 167' AGL/270' MSL. Rwv 33. terrain beginning 1 NM from departure end of runway. 3700' right of centerline to 3700' left of centerline, up to 439' MSL. Building 3811' from departure end of runway. 467' right of centerline 184' AGI /254' MSI Tower 1.9 NM from departure end of runway, 1447' left of

CRISFIELD. MD

CRISEIELD MUNI

centerline, 255' AGL/405' MSL.

TAKE-OFF MINIMUMS: Rwvs 6.24. NA-obstacles DEPARTURE PROCEDURE: Rwv 14. climb via heading 142° to 900 before proceeding on course. Rwy 32, climb via heading 322° to 900 before proceeding on course.

CULPEPER. VA

CULPEPER RGNL (CJR)

ORIG 07354 (FAA)

DEPARTURE PROCEDURE: Rwv 22, climb heading 218° to 1000 before turning right.

NOTE: Rwv 4. tree 79' from departure end of runway. 418' left of centerline 86' AGL/337' MSL. Vehicle on road 207' from departure end of runway, 367' left of centerline, 15' AGL/330' MSL, Tree 3396' from departure end of runway, 514' right of centerline, 91' AGL/410'MSL. Rwy 22, tree 128' from departure end of runway, 332' left of centerline, 25' AGL/334' MSL Multiple trees beginning 272' from departure end of runway, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from departure end of runway, 68' left of centerline, 27' AGL/356' MSL.

CUMBERLAND, MD

GREATER CUMBERLAND RGNL

TAKE-OFF MINIMUMS: Rwy 5, 1700-2 or std. with a min. climb of 300' per NM to 3400. Rwy 11, 1600-2 or std. with a min. climb of 520' per NM to 3400. Rwy 23, 1200-2 or std. with a min. climb of 660' per NM to 3400. Rwv 29. NA

DEPARTURE PROCEDURE: Rwys 5,11, climb runway heading to 3400 before proceeding on course. Rwy 23, climbing left turn to intercept 177° course from CBE NDB to 3400 before proceeding on course.

DANVILLE, VA

DANVILLE RGNI

TAKE-OFF MINIMUMS: Rwys 2,31, 300-1 or std. with a min, climb of 240' per NM to 1000.

DAVISON AAF (KDAA) FORT BELVOIR VA

* Or standard with minimum climb of 380/NM to 500. TAKE-OFF OBSTACLES: Rwv 32, 63' AGL tree 865' from departure end of rwy, 82' right of centerline.

Rwy 32 300-1*

DOVER AFB (KDOV)

TAKE-OFF OBSTACLES: Rwv 1. possible aircraft/ vehicles at DER hammerhead just left of rwy centerline. up to 65' AGL/91' MSL, Rwv 19, possible aircraft/ vehicles at DER hammerhead just right of rwy centerline, up to 65' AGL/91' MSL. Rwy 32. multiple C-5s parked on ramp beginning 1535' thru 2780' from DER, 1010' left of centerline, up to 65' AGL/98' MSL.

Bldg 3900' from DER, 760' left of centerline, 88' AGL/ 119' MSL. Possible taxiing aircraft/vehicles on taxilane Alpha beginning 565' thru 2780' from DER, 750' left of centerline, up to 65' AGL/98' MSL, Possible large aircraft 2800' from DER, on taxiway Golf just left of centerline, up to 65' AGL/92' MSL.

DOVER/CHESWOLD. DE

DELAWARE AIRPARK

NOTE: Rwy 9, multiple trees beginning 26' from departure end of runway, 50' left of centerline, up to 100' AGL/149 MSL. Pole line 1151 from departure end of runway, 36' right of centerline, 50' AGL/99' MSL Multiple trees beginning 815' from departure end of runway, 505' right of centerline, up to 100' AGL/154' MSL. Rwv 27, multiple trees beginning 231' from departure end of runway, 85' left of centerline, up to 100' AGL/169' MSL. Multiple trees beginning 829' from departure end of runway, 43' right of centerline, up to 100'AGL/164'MSL.

DUBLIN, VA

NEW RIVER VALLEY (PSK) AMDT 2 09071 (FAA)

TAKE-OFF MINIMUMS: Rwy 24, 200-11/2 or std. w/min.

climb of 310' per NM to 2400. DEPARTURE PROCEDURE: Rwy 6, climbing right turn

heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course.

Rwy 24, climb heading 238° to 4000 before proceeding on course

NOTE: Rwv 6. tree 321' from DER, 493' left of centerline. 100' AGL/2112' MSL. Terrain 122' from DER, 460' left of centerline, up to 2105' MSL. Rwy 24, pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL. Pole 669' from DER, 558' right of centerline, 18' AGL/2137' MSL. Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231'MSL. Tower 5078' from DER 1017' left of centerline, 101' AGL/2300' MSL. Trees 226' from DER, 271' left of centerline, up to 103' AGL/2302' MSL.

Terrain 68' from DER, 281' right of centerline, up to 2116'MSL.



$\overline{f V}$ take-off minimums and (obstacle) departure procedures $\overline{f V}$

EASTON, MD FASTON/NEWNAM FIFI D

TAKE-OFF MINIMUMS: Rwv 22, 300-2 or std. w/ climb

of 241' per NM to 500.

NOTE: Rwv 4, vehicles on roads beginning 199' from

departure end of runway, 350' right of centerline, up to 15' AGL/102' MSL. Multiple poles beginning 434' from

departure end of runway, 88' right of centerline, up to 31' AGL/100' MSL. Multiple trees beginning 1485' from

departure end of runway, 46' right of centerline, up to 64' AGL/133' MSL. Tree 1509' from departure end of

runway, 38' left of centerline, 47' AGL/116' MSL Rwv 15, fence 2' from departure end of runway, 411' left of centerline, 8' AGL/57' MSL. Multiple poles beginning

721' from departure end of runway, 183' left of centerline. up to 64' AGL/123' MSL. Multiple poles beginning 828'

from departure end of runway, 514' right of centerline, up to 26' AGL/85' MSL. Multiple trees beginning 862' from departure end of runway, 275' left of centerline. up to 89' AGL/148' MSL. Multiple trees beginning 1357' from

departure end of runway, 238' right of centerline, up to 94' AGL/153' MSL. Rwy 22, tree 1251' from departure end of runway, 786' right of centerline, 56' AGL/95' MSL. Multiple trees beginning 1323' from departure end of runway, 759' left of centerline, up to 90' AGL/129' MSL Tower 1.6 NM from departure end of runway, 2373' left of centerline, 276' AGL/291' MSL. Rwy 33, multiple trees 10' from departure end of runway, 19' right of centerline,

up to 139' AGL/158' MSL. Vehicle on road 352' from departure end of runway, 405' right of centerline, 15' AGL/59' MSL. Pole 888' from departure end of runway, 409' left of centerline, 19' AGL/58' MSL. Multiple trees beginning 1153' from departure end of runway, 245' left of centerline, up to 99' AGL/118' MSL.

ELKTON. MD

CECIL COUNTY

TAKE-OFF MINIMUMS: NOTE: Rwy 13, cross departure end of runway at or above 27' AGL/89' MSL. Rwy 31, 300-11/2 or std. w/min. climb of 290' per NM to 400

DEPARTURE PROCEDURE: Rwy 31, climb heading 308° to 900 before turning left. NOTE: Rwy 13, trees 185' from departure end of runway,

110' right of centerline, 50' AGL/113' MSL. Trees 325' from departure end of runway, 125' left of centerline, 75' AGL/138' MSL. Rwy 31, trees, 1350' from departure end of runway, on centerline, 115' AGL/221' MSL. Trees beginning 1050' from departure end of runway, 781' left to 781' right of centerline, up to 100'

AGL/309'MSL

EMPORIA, VA EMPORIA-GREENSVILLERGNI (EMV)

ORIG 09155 (FAA) NOTE: Rwv 15, vehicle on roadway 21' from DER 291' left of centerline, up to 15' AGL/124' MSL. Trees

beginning 56' from DER 245' right of centerline up to 60' AGL/169' MSL Trees beginning 98' from DER 231' left of centerline, up to 60' AGL/169' MSL. Trees beginning 1387 from DER 387 left of centerline up to 60' AGL/149' MSL. Rwv 33, trees beginning 115' from DER, 276' right of centerline, up to 60' AGL/189' MSL. Trees beginning 138' from DER, 321' left of centerline.

up to 60' AGL/189' MSL. Vehicle on roadway, 163' from DER 524' right of centerline up to 15' AGI /144' MSI Vehicle on roadway, 222' from DER, 534' left of centerline, up to 17' AGL/146' MSL.

FARMVILLE. VA

FARMVILLE RGNL (FVX)

ORIG 07354 (FAA)

NOTE: Rwv 3. tree 1335' from departure end of runway. 277' right of centerline, 59' AGL/476' MSL, Rwv 21. vehicle on road 18' from departure end of runway, 495' left of centerline, 15' AGL/425' MSL. Tree 675' from departure end of runway, 315' right of centerline, 42' AGI /452' MSI

FELKER AAF (KFAF).

FORT EUSTIS. VA.

Rwv 14.32 standard. TAKE-OFF OBSTACLES: Rwy 14: Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL, Rwy 32: Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL. Trees beginning 2931' from DER, 186'

08297

left of centerline up to 74' AGL/85' MSL. FORT MEADE (ODENTON), MD

TIPTON

NOTE: Rwy 10, cross departure end of runway at or above 17' AGL/167' MSL. Rwv 10. trees 1052' right of departure end of runway, 88' AGL/238' MSL.

FRANKLIN, VA

FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

AMDT 2 09071 (FAA)

NOTE: Rwv 9. trees beginning 1977' from DER, 349' left of centerline, up to 100' AGL/139' MSL. Trees beginning 1287' from DER, 236' right of centerline, up to 100' AGL/

134' MSL. Vehicle on road 533' from DER, 604' right of centerline, 15' AGL/59' MSL. Rwy 27, trees beginning 100' from DER, 444' left of centerline, up to 100' AGL/ 134' MSL. Trees beginning 520' from DER, 520' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 308' from DER, left to right of centerline, 15' AGL/44'

FREDERICK, MD

MSL.

FREDERICK MUNI

TAKE-OFF MINIMUMS: Rwy 12, 500-3 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: Rwys 5, 23, climb runway heading to 2000 before proceeding on course. Rwy 30, climbing right turn to intercept FDK VOR R-010 to 2400 before proceeding on course.



FREDERICKSBURG. VA SHANNON

TAKE-OFF MINIMUMS: Rwv 24, 800-3 or std. with a min_climb of 290' per NM to 800

DEPARTURE PROCEDURE: Rwv 24, climb to 800 via

runway heading before proceeding on course. NOTE: 744' tower 2.1 NM from departure end of Rwy 24.

FRIENDLY. MD

POTOMAC AIRFIELD

TAKE-OFF MINIMUMS: Rwvs 6.24, 300-1.

NOTE: Rwv 6, 50' AGL trees 300' left of departure end of

runway, 75' AGL trees 320' right of departure end of runway, Rwy 24, 80' AGL trees 200' right of departure end of runway, 75' AGL trees 200' left of departure end of runway, 30' AGL hanger 200' from departure end of runway 190' right of centerline

FRONT ROYAL, VA

FRONTROYAL-WARREN COUNTY TAKE-OFF MINIMUMS: Rwv 9, std. w/min, climb of 409' per NM to 1100, or 2300-3 for climb in visual conditions. Rwv 27. NA-obstacles. DEPARTURE PROCEDURE: Rwv 9. climbing left turn

via MRB R-216 to MRB VORTAC before proceeding on course, do not exceed 180 knots until MRB VORTAC: or for climb in visual conditions: cross Front Royal-Warren County Airport at or above 2900 MSL before proceeding on course

NOTE: Rwy 9, multiple trees beginning 148' from departure end of runway, 99' right of centerline, up to 100' AGL/939' MSL. Multiple trees beginning 182' from departure end of runway, 189' left of centerline, up to 100' AGI /854' MSI

MONTGOMERY COUNTY AIRPARK TAKE-OFF MINIMUMS: NOTE: Rwy 14,62' AGL trees

197' right of centerline. Rwy 32, 63' AGL trees 335' left of centerline.

GALAX-HILLSVILLE, VA

GAITHERSBURG. MD

TWIN COUNTY

TAKE-OFF MINIMUMS: Rwv 19, 300-1 or std. with a min. climb of 240' per NM until passing 3000. Rwy 1, 300-1 or std, with a min, climb of 310' per NM until passing 3000.

GEORGETOWN.DE SUSSEX COUNTY

TAKE-OFF MINIMUMS: Rwvs 4.13.22.31.300-1.

GRUNDY. VA GRUNDY MUNI

TAKE-OFF MINIMUMS: Rwy 22, 300-2 or std. with a min. climb of 240' per NM to 2700.

HAGERSTOWN.MD HAGERSTOWN RGNL -RICHARD A. HENSON

FIELD TAKE-OFF MINIMUMS: Rwv 2, 300-1.

DEPARTURE PROCEDURE: Rwy 9, climbing left turn to 2500 via 040° heading to intercept the HGR R-084 before departing as cleared. Rwvs 2, 20, climb to 2000 before turning eastbound.

HOT SPRINGS, VA INGALLS FIFLD

TAKE-OFF MINIMUMS: Rwv 7.500-1 or std. with a min. climb of 320' per NM to 4400. Rwy 25, 600-1 or std. with a min. climb of 390' per NM to 5000. DEPARTURE PROCEDURE: Rwv7. climb runwav heading to 4400 before proceeding on course.

Rwy 25, climb runway heading to 5000 before proceeding on course.

INDIAN HEAD, MD MARYI AND

TAKE-OFF MINIMUMS: Rwv 36, 300-11/4 or std. w/ min.

climb of 360' per NM to 600. NOTE: Rwv 18. trees abeam departure end of runway 125' left of centerline, up to 100' AGL/256' MSL. Trees 269' from departure end of runway, on centerline, 100' AGI /256' MSI Trees abeam departure end of runway 125' right of centerline, up to 100' AGL/256' MSL.

AGI /271 MSI Tree 567 from departure end of runway

125' left of centerline, 60' AGL/230' MSL. Rising terrain

beginning 73' from departure end of runway, 64' right of

Tower 6170' from departure end of runway 620' right of centerline, 190' AGL/384' MSL. Rwy 36, trees 258' from departure end of runway, 309' left of centerline, up to 100'

JONESVILLE, VA LEE COUNTY

centerline, 180' MSL.

TAKE-OFF MINIMUMS: Rwy7, std. w/ min. climb of 467' per NM to 3800, or 1900-3 for climb in visual conditions. Rwy 25, std. w/min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions. DEPARTURE PROCEDURE: Rwys 7, 25, for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.

NOTE: Rwv7. terrain 116' from departure end of runway. 72' right of centerline, 1439' MSL, Terrain 691' from departure end of runway, 53' right of centerline, 1459' MSL. Terrain 267' from departure end of runway, 190' left of centerline, 1439' MSL. Terrain 479' from departure end of runway, 68' left of centerline, 1459' MSI



LANGLEY AFB (KLFI) HAMPTON VA

Orig 07354

* Or standard with minimum climb of 240 ft/NM to 700.

NOTE: Rwy 26 cross DER at or above 10' AGL /18' MSL TAKE-OFF OBSTACLES: Rwv8 Boat 2261 from

DER 779 left of centerline 60 AGL/80 MSL Boat 2500' from DER, 59' left of centerline, 60' AGL/ 70' MSI Vehicle on road 1051' from DER 702' right of centerline, 15' AGL/43' MSL, Boat 2841' from DER, 641' right of centerline, 60' AGL/80' MSL, Multiple towers 2.0 NM from DER 1.7 NM right of centerline, 503' AGL/511' MSL, Rwy 26, Tree 4050' from DER 685' left of centerline 100' AGL/ 120' MSL. Tree 4840' from DER, 687' left of centerline.100' AGL/136' MSL. Tree 4044' from DER. 31'left of centerline 101'AGL/113'MSL Tree 4153' from DER, 342' right of centerline, 101' AGL/ 114' MSI Tree 4037' from DER 623' right of centerline, 101' AGL/110' MSL, Tree 4377' from DER, 435' right of centerline, 100' AGL/121' MSL. Tree 3805' from DER 1184' right of centerline 100'AGL/133'MSL.

LAUREL, DE

LAURFI

DEPARTURE PROCEDURE: Rwvs 15.33, climb runway heading to 1200 before proceeding on course.

LAWRENCEVILLE, VA

LAWRENCEVILLE/BRUNSWICK MUNI TAKE-OFF MINIMUMS: Rwvs 6.24, NA.

NOTE: Rwv 18, trees 1654' from departure end of runway, 772' left of centerline, 88' AGL/407' MSL. Trees 200' from departure end of runway, on centerline. 22' AGI /321' MSI Rwv 36, trees 1487' from departure end of runway, 20' left of centerline, 88' AGL/420' MSL. Trees 113' from departure end of runway, 372' right of centerline, 88' AGL/420' MSL.

LEESBURG. VA

LEESBURG EXECUTIVE (JYO)

AMDT 1 09183 (FAA)

DEPARTURE PROCEDURE: Rwv 35, climb heading 351° to 900 before proceeding on course. NOTE: Rwy 17, building 167' from DER, 360' left of

centerline, 22' AGL/401' MSL, Pole 958' from DER. 373' left of centerline, 32' AGL/421' MSL. Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL. Rwy 35, terrain 96' from DER, 453' left of centerline, 381' MSL, Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL. Trees 682' from DER, 333' right of centerline, up to 100' AGL/459' MSL. Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.

LEONARDTOWN.MD ST MARY'S COUNTY RGNI

NOTES: Rwv 11, multiple trees beginning 88' from

departure end of runway 339' left of centerline up to 80' AGL/205' MSL. Multiple trees beginning 61' from departure end of runway, 193' right of centerline up to 80' AGL/205' MSL. Rwv 29, multiple trees beginning 996' from departure end of runway, 227' left of centerline up to 79' AGL/221' MSL. Multiple trees beginning 596' from departure end of runway, 277' right of centerline up to 71' AGL/213' MSL. Multiple towers on buildings beginning 53' from departure end of runway, 400' right of centerline up to 26' AGL/168' MSL. Equipment on building 223' from departure end of runway, 449' right of centerline. 15' AGL/169' MSL. Tower 402' from departure end of runway, 399' right of centerline, 33' AGL/175' MSL. Fence 496' from departure end of runway, 241' right of centerline, 22' AGL/164' MSL.

LOUISA. VA

LOUISA COUNTY/FREEMAN FIELD (LKU) ORIG 08157 (FAA)

NOTE: Rwv 9, trees beginning abeam departure end of runway, 369' right of centerline, up to 100' AGL/589' MSL. Trees beginning 226' from departure end of runway, 541' left of centerline, up to 100' AGL/559' MSL. Trees beginning 1200' from departure end of runway, left and right of centerline, up to 100'AGL/539'MSL, Rwy 27. trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/569' MSL, Trees beginning 211' from departure end of runway, 133' right of centerline, up to 100' AGL/569' MSL. Trees beginning 69' from departure end of runway, 513' left of centerline, up to 100' AGL/569' MSL. Trees beginning 586' from departure end of runway, left and right of centerline, up to 100' AGL/549' MSL.

LURAY. VA

LURAY CAVERNS

TAKE-OFF MINIMUMS: Rwys 4, 22, 1000-3 DEPARTURE PROCEDURE: Climb visually so as to cross airport at or above 2000, then continue climb to 5000 via LUA 215° bearing before proceeding on

LYNCHBURG. VA

FAI WELL

TAKE-OFF MINIMUMS: Rwy 10, 1100-21/2 for climb in visual conditions. Rwy 28, NA-obstacle.

DEPARTURE PROCEDURE: Rwy 10, for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.

NOTE: Rwy 10, multiple trees 9' from departure end of runway, 87' right of centerline, up to 100' AGL/899' MSL. Multiple power lines 2896' from departure end of runway. 1192' right of centerline, up to 149' AGL/968' MSL.



$\overline{f V}$ take-off minimums and (obstacle) departure procedures $\overline{f V}$

LYNCHBURG, VA (CON'T) LYNCHBURG RGNL/PRESTON GLENN

before proceeding on course.

FIELD (LYH) AMDT 8 08073 (FAA)

TAKE-OFF MINIMUMS: Rwv 17, 300-21/4 or std. w/

min. climb of 232' per NM to 1500. Rwy 35. std. w/min. climb of 350' per NM to 3000, or 1700-3 for climb in visual conditions. DEPARTURE PROCEDURE: Rwv 4. climb heading

036° to 2200 before proceeding on course, Rwy 17. climb heading 169° to 1800 before turning right, Rwy 22. climb heading 216° to 1800 before turning right. Rwy 35, climb heading 349° to 3000 before turning left, or for climb in visual conditions; cross Lynchburg

Rgnl/Preston Glenn Field at or above 2500' MSL

NOTE: Rwv 4. trees beginning 2029' from departure end of runway, 62' right of centerline up to 81' AGL/999' MSL. Trees beginning 1422' from departure end of runway, 3' left of centerline up to 76' AGL/995' MSL. Poles beginning 427' from departure end of runway. 483' right of centerline up to 44' AGL/1044' MSL. Obstruction lights on fence beginning 2' from departure end of runway, 500' right of centerline up to 30' AGL/948' MSL, Antenna on building 395' from departure end of runway, 277' right of centerline 15' AGL/954' MSL, Light 606' from departure end of runway, 599' right of centerline, 18' AGL/982' MSL. Building 400' from departure end of runway, 345' right of centerline, 12' AGL/951' MSL, Rwv 17, trees beginning 284' from departure end of runway, 77' left of centerline up to 277' AGL/1195' MSL. Trees beginning 265' from departure end of runway, 178' right of centerline up to 57' AGL/969' MSL. Obstruction light on pole 9326' from departure end of runway 333' left of centerline, 270' AGL/1188 MSL. Rwy 22, trees beginning 274' from departure end of runway, 245' right of centerline up to 41' AGL/979' MSL. Trees beginning 2616' from departure end of runway, 206' left of centerline up to 41' AGL/979' MSL. Poles beginning

2872' from departure end of runway, 603' right of centerline up to 44' AGL/982' MSL. Rwv 35, trees

beginning 2955' from departure end of runway, 140'

right of centerline up to 96' AGL/ 1014' MSL. Trees

centerline up to 119' AGL/1037' MSL. Pole 36' from

beginning 722' from departure end of runway, 71' left of

departure end of runway 98' left of centerline, 25' AGL/

MANASSAS. VA MANASSAS RGNI/HARRY P DAVIS FIFI D

NOTE: Rwy 16R, terrain 64' from departure end of

runway, 136' right of centerline, 179' MSL. Numerous trees beginning 242' from departure end of runway, 53' right of centerline up to 100' AGL/279' MSL. Vehicle on road 886' from departure end of runway, 463' right of centerline, 15' AGL/214' MSL, Terrain 33' from departure end of runway, 427' left of centerline, 179' MSL. Numerous trees beginning 688' from departure end of runway 40' left of centerline, up to 100' AGL /279' MSL. Rwy 16L, terrain 56' from departure end of runway, 177' left of centerline, 179' MSL, Numerous trees beginning 1911' from departure end of runway, 158' left of centerline, up to 83' AGL/292' MSL, Terrain 87' from departure end of runway, 386' right of centerline, 179' MSL. Numerous trees beginning 2559' from departure end of runway, 29' right of centerline, up to 100' AGL/273' MSL. Rwy 34R, sign 70' from departure end of runway, 91' right of centerline, 6' AGL/ 196' MSL. Terrain beginning 23' from departure end of runway, 222' right of centerline, up to 199' MSL. Vehicle on road 198' from departure end of runway, 9' right of centerline, 15' AGL/214' MSL. Numerous trees beginning 1860' from departure end of runway, 828' right of centerline, 70' AGL/280' MSL. Numerous trees beginning 2875' from departure end of runway, 484' left of centerline, up to 27' AGL/266' MSL, Rwv 34L, terrain 107' from departure end of runway, 409' right of centerline, 189' MSL. Numerous trees beginning 2802' from departure end of runway, 251' right of centerline, up to 27' AGL/266' MSL. Terrain 76' from departure end of runway, 154' left of centerline, 189' MSL. Vehicle on road 366' from departure end of runway, 19' left of centerline, 15' AGL/204' MSL. Numerous trees beginning 1603' from departure end of runway, 249' left of centerline, up to 43' AGL/252' MSL. Tower 3398' from departure end of runway, 1102' left of centerline, 68'

MARION/WYTHEVILLE. VA

MOUNTAIN EMPIRE

AGL/274'MSL.

TAKE-OFF MINIMUMS: Rwy 8, 300-1. Rwy 26, 800-1. DEPARTURE PROCEDURE: Rwy 8, climb direct to MK NDB then climb to 5300 via 073° bearing before proceeding on course. Rwy 26, climb to 5400 via 253° bearing from MK NDB before proceeding on course.

MARTINSVILLE, VA

BLUE RIDGE (MTV)

AGL/956' MSL.

AMDT 2A 08269 (FAA)

TAKE-OFF MINIMUMS: Rwy 12, std. with a min. climb of 240' per NM to 2100. Rwy 30, 300-1 or std. with a min. climb of 370' per NM to 1100.

BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course. Rwy 30, climbing right turn direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course. NOTE: Rwy 12, trees 38' from departure end of runway, 380' right of centerline, 82' AGL/941' MSL. Trees 316' from departure end of runway, 320' left of centerline, 56'

DEPARTURE PROCEDURE: Rwy 12, climb direct

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

943' MSL.



MELFA. VA ACCOMACK COUNTY

NOTE: Rwv 3, multiple trees beginning 41' from departure end of runway 221' right of centerline, up to 84' AGI /128' MSI Truck on road 204' from departure end of runway 231' left of centerline 15' AGL/61' MSL Multiple trees beginning 249' from departure end of runway, 14' left of centerline, up to 106' AGL/155' MSL Truck on road 494' from departure end of runway 228' left of centerline 15' AGL /62' MSL Rodon obstruction light tower 862' from departure end of runway 402 left of centerline 55 AGI /99 MSI Rwy 21, multiple trees beginning 27' from departure end of runway 395' right of centerline, up to 91' AGL /135 MSI Multiple trees 504' from departure end of runway, 403' left of centerline, up to 110' AGL/144' MSI

MIDDLETOWN, DE

SUMMIT

TAKE-OFF MINIMUMS: Rwv 35, 300-1, or std, with a min, climb of 280' per NM to 400.

MITCHELLVILLE. MD

FRFFWAY

TAKE-OFF MINIMUMS: Rwv 18, 300-1 or std. with a min. climb of 295' per NM to 500. Rwv 36, 300-1 or std, with a min, climb of 500' per NM to 600. NOTE: Rwv 18, trees 328' from departure end of runwav. 20' AGL/178' MSL. Trees 838' from departure end of runway 337' left of centerline 50' AGL /220' MSL. Rwv 36, cross departure end of runway at or above 35' AGL/203' MSL. Road/vehicle, 231' from departure end of runway, 17' AGL/185' MSL, Trees 332' from departure end of runway, 20' AGL/188' MSL. Power poles and lines crossing centerline, 2280' from departure end of runway, 186' AGL/345' MSL.

MONETA. VA

SMITH MOUNTAIN LAKE

TAKE-OFF MINIMUMS: Rwvs 5, 23, 300-1. DEPARTURE PROCEDURE: Rwys 5, 23, climb straight ahead to 1600 before proceeding on course.

NEWPORT NEWS, VA NEWPORT NEWS/WILLIAMSBURG INTI

TAKE-OFF MINIMUMS: Rwv 20, 300-11/4 or standard

with a minimum climb of 255' per NM to 300. NOTE: Rwv 2, bush 295' from departure end of runway. 291' right of centerline 22'AGL/62' MSL. Tree 937' from departure end of runway, 603' left of centerline 81' AGL/ 131'MSL. Pole 1221' from departure end of runway. 487' right of centerline 31' AGL/81' MSL Tree 1275' from departure end of runway, 517' left of centerline 79' AGL/132 MSL. Multiple trees beginning 1554 from departure end of runway, 298' left of centerline up to 88' AGL/141' MSL. Tree 1686' from departure end of runway, 428' right of centerline 61' AGL/114' MSL. Tree 1849' from departure end of runway, 598' right of centerline 72' AGL/125' MSL. T-L tower 3351' from departure end of runway, 1008' left of centerline 109' AGL/161 MSL. Rwy7, tree 371' from departure end of runway, 588' left of centerline 36' AGL/73' MSL, T-L tower 4120' from departure end of runway, 1324' right of centerline 93' AGL/116'MSL. T-L tower 5625' from departure end of runway, 1345' left of centerline 133' AGL/191'MSL. Rwy 20, bush 96' from departure end of runway, 293' left of centerline 22' AGL/52' MSL, Stack 5977' from departure end of runway, 598' left of centerline 186' AGL/227' MSL. Rwv 25. tree 694' from departure end of runway, 549' right of centerline 42' AGL/65' MSL. Tree 1020' from departure end of runway, 703' right of centerline 23' AGL/97' MSL. Tree 1622' from departure end of runway, 529' left of centerline 59' AGL/79' MSL. Tree 2654' from departure end of runway, 335' right of

NORFOLK, VA

CHESAPEAKE RGNI

DEPARTURE PROCEDURE: Rwvs 5, 23, climb runway heading to 500 before proceeding on course. NOTE: Rwy 5, cross departure end of runway at or above 27' AGL/48' MSL. Trees 2200' from departure end of runway, 545' left of centerline, 81' AGL/102' MSL. Rwy 23, cross departure end of runway at or above 25' AGL/ 43'MSL, Trees 1600' from departure end of runway, 710' right of centerline, 62' AGL/82' MSL.

centerline 86' AGL/106' MSL. Tree 3435 from departure

end of runway, 1125' right of centerline 116' AGL/139'



TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES $\overline{\mathbf{V}}$

NORFOLK, VA (CON'T) HAMPTON ROADS EXECUTIVE

TAKE-OFF MINIMUMS: Rwv 10, std. w/min. climb of 217 per NM to 700 or alternatively w/std_takeoff minimums and a normal 200' per NM climb gradient. takeoff must occur no later than 2100' prior to departure end of runway or 1700-21/2 for climb in visual conditions DEPARTURE PROCEDURE: Rwv 2, climb heading 019° to 1600 before turning west. Rwy 10, climb heading 102° to 900 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Executive Airport at or above 1600 before proceeding on course Rwv 20. climb heading 199° to 1000 before turning North. Rwy 28, climb heading 282° to 1500 before turning North. NOTE: Rwy 2, multiple trees beginning 693' from departure end of runway, 286' left of centerline, up to 100' AGL/124' MSL. Multiple trees beginning 917' from departure end of runway, 422' right of centerline, up to 100' AGL/124' MSL. Rwv 10, trees 688' from departure end of runway, 374' left of centerline, 61' AGL/85' MSL. Vehicle on road and multiple trees beginning 750' from departure end of runway, 359' right of centerline, up to 100' AGL/124' MSL. Tower 1.1 NM from departure end of runway, 1424' left of centerline, 175' AGL/192' MSL. Rwy 20, vehicle on road and multiple trees beginning 199' from departure end of runway, 250' left of centerline.

up to 100' AGL/124' MSL. Vehicle on road and multiple

trees beginning 595' from departure end of runway, 8'

right of centerline, up to 100' AGL/124' MSL, Rwv 28.

multiple trees beginning 2711' from departure end of runway, 366' left of centerline, up to 100' AGL/124' MSL.

Vehicle on road 3' from departure end of runway, 112'

right of centerline, 17' AGL/34' MSL. Multiple trees

of centerline, up to 100' AGL/124' MSL.

beginning 2595' from departure end of runway, 362' right

NORFOLK INTL

NORFOLK, VA (CON'T) NOTES: Rwv 5, mobile crane 4091' from departure end of runway, 1249' right of centerline, 150' AGL/163' MSI Multiple ship masts beginning 2761' from departure end of runway, 22' right of centerline, up to 100' AGL/100' MSL. Multiple ship masts beginning 2564' from departure end of runway, 133' left of centerline, up to 100' AGL/100' MSL. Obstruction light on pole 3978' from departure end of runway, 931' left of centerline, 138' AGL/146' MSL. Multiple towers

beginning 4045' from departure end of runway, 982' left of centerline, up to 138' AGL/146' MSL. Obstruction light on pole 2898' from departure end of runway, 811' right of centerline, 84' AGL/98' MSL, Antenna 4115' from departure end of runway, 1585' right of centerline, 117' AGL/131' MSL. Tower 2974' from departure end of runway, 772' right of centerline, 90' AGL/98' MSL. obstruction light on pole 2696' from departure end of runway, 1063' left of centerline, 84' AGL/91' MSL. Bush 29' from departure end of runway, 307' right of centerline, 6' AGL/20' MSL. Tree 1459' from departure end of runway, 159' left of centerline, 41' AGL/55' MSL. Tower 2938' from departure end of runway, 1254' left of centerline. 89' AGL/94' MSL. Tree 1399' from departure end of runway, 201' right of centerline, 38' AGL/52' MSL. Sign 82' from departure end of runway, 301' left of centerline, 2' AGL/19' MSL. Terrain 23' from departure end of runway, 227' left of centerline, 0' AGL/17'MSL, Rwy 14, tree 2541' from departure end of runway, 432' right of centerline, 101' AGL/121' MSL. Multiple trees beginning 443' from departure end of runway, 398' left of centerline, up to 75' AGL/95' MSL. Pole 1410' from departure end of runway, 254' right of centerline, 45' AGL/62' MSL, Rwv 23, rod on obstruction light pole 1012' from departure end of runway, 650' right of centerline, 56' AGL/73' MSL. Multiple trees beginning 619' from departure end of runway, 584' left of centerline, up to 81' AGL/98' MSL. Obstruction light on pole 1433' from departure end of runway, 738' left of centerline, 54' AGL/71' MSL. Multiple trees beginning 323' from departure end of runway, 504' right of centerline, up to 26' AGL/43' MSL. Pole 2165' from departure end of runway, 840' right of centerline, 57' AGL/74' MSL. Rwy 32, multiple trees beginning 17' from departure end of runway, 460' right of centerline, up to 81' AGL/98' MSL. Multiple trees and poles beginning 60' from departure end of runway, 333' left of centerline, up to 87' AGL/92' MSL. Road 207' from departure end of runway, 231' right of centerline, 12' AGL/29' MSL. Multiple obstruction lights on towers 201' from departure end of runway,

NORFOLK NS (CHAMBERS FIELD)(KNGU)

NORFOLK, VA 08269

135' left of centerline, up to 12' AGL/27' MSL.

Rwv 28: 300-11/2*

* Or standard with minimum climb of 235'/NM (DoD) or 245'/NM (civil) to 300.

TAKE-OFF OBSTACLES: Rwy 10: Trees with a maximum height of 100' within 1500' of departure end of rwy. Cross departure end of rwy at or above 35' AGL/48'



OAKLAND, MD GARRETT COUNTY (2G4)

ORIG 08101 (FAA)

NOTE: Rwv 9. Multiple trees beginning 75' from

departure end of runway 94' left of centerline up to 100' AGL/2939' MSL. Multiple trees beginning 76' from departure end of runway 47' right of centerline up to 100' AGL /2939' MSL Rwy 27. Multiple trees beginning 15' from departure end of runway, 334' left of centerline, up to 100' AGL/3019' MSL. Multiple trees beginning 19' from departure end of runway. 107' right of centerline, up to 100' AGL/3019' MSL.

OCEAN CITY, MD

OCEAN CITY MUNI

TAKE-OFF MINIMUMS: Rwvs 2, 32, 400-2 or std. with a min_climb of 260' per NM to 500

OCEANA NAS (APOLLO SOUCEK FIELD)(KNTU)

VIRGINIA BEACH, VA. 07214 TAKE-OFF OBSTACLES: Rwv 5L. Trees 3706' from DER, 97' right of centerline, 115' MSL, Rwy 5R. Trees 3706' from DER, 603' left of centerline, 115' MSI

ORANGE, VA

ORANGE COUNTY

centerline. Rwv 24.

TAKE-OFF MINIMUMS: Rwv 8, 300-1. DEPARTURE PROCEDURE: Rwys 8, 26, climb runway heading to 1500 before turning.

PATUXENT RIVER NAS (TRAPNELL FIELD).(KNHK)

PATUXENT RIVER, MD 09267

Rwv 6. Obstacle identification surface begins 15' above

Rwy 14, Obstacle identification surface begins 35' above DER.

Rwy 20, Obstacle identification surface begins 20'

Rwv 24. Obstacle identification surface begins 15' above DER.

TAKE-OFF OBSTACLES: Rwy 6, Pole 63' AGL/83' MSL, 1967' from DER, 981' left of centerline. Rwy 14, Trees 42' AGL/57' MSL, 190' from DER, 223' left of centerline. Two lane road crossing rwy thld max ht 17' AGL/33' MSL, 193' from DER, Pole 34' AGL/50' MSL, 315' from DER, 198' left of centerline, Trees 43' AGL/ 59' MSL, 520' from DER, 637' right of centerline. Rwy 20, Trees 44' AGL/81' MSL, 1555' from DER, 845' right of centerline. Trees 56' AGL/93' MSL, 2057' from DER, 778' right of centerline. Trees 67' AGL/ 104' MSL, 2077' from DER, 818' right of centerline. Trees 93' AGL/130' MSL, 3029' from DER, 32' left of

43' AGL/81' MSL, 1682' from DER, 582' left of centerline. Trees 57' AGL/93' MSL, 2015' from DER, 965' left of centerline, Trees 66' AGL/104' MSL, 2056' from DER, 948' left of centerline.

PETERSBURG. VA DINWIDDIE COUNTY (PTB)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: Rwvs 32, 14, NA-obstacles.

NOTE: Rwv 5, numerous trees beginning 911' from departure end of runway, 551' left of centerline, up to 65' AGI /254 MSI Fence 161 from departure end of runway 472' right of centerline 7' AGI /196' MSI. Tree 1031' from departure end of runway, 690' right of centerline 57' AGL /256' MSL Rwy 23, numerous trees beginning 2615' from departure end of runway, 69' right of centerline, up to 80' AGL/289' MSL. Fence 10' from departure end of runway 476' left of centerline 10' AGL/ 199' MSL. Numerous trees beginning 819' from departure end of runway 528' left of centerline up to 72' AGL/281' MSL.

PHILLIPS AAF (KAPG)

ABERDEEN PROVING GROUND, MD ... 07270 TAKE-OFF OBSTACLES: Rwv 4 vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL. Tree 1126' from DER 118' left of centerline 29' AGL/88' MSL. Rwy 22, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL, Multiple trees beginning 398' from DER, 311' right

of centerline, up to 50' AGL/89' MSL. Tree 1094'

from DER, 49' left of centerline, 43' AGL/62' MSL,

QUANTICO MCAF (TURNER FIELD) (KNYG)

QUANTICO, VA Diverse departures not authorized.

Rwv 2.400-21/2*

Rwy 20, 300-11/4**

- * Or standard with minimum civil climb of 470 ft/NM to 600. minimum military climb of 410 ft/NM to 500.
- ** Or standard with minimum civil climb of 360 ft/NM to 400, minimum military climb of 320 ft/NM to 400. DEPARTURE PROCEDURE: Rwv 2. Climbing right

turn to 2000 direct BRV VORTAC or to assigned

heading for radar vectors. Rwy 20, Climb to 2000 direct BRV VORTAC or as assigned for radar vectors. TAKE-OFF OBSTACLES: Rwy 2, Multiple trees on rising terrain 100' AGL/296' MSL, 4075' from DER, 803' left of

centerline. Multiple trees on rising terrain 100' AGL/197' MSL, 5763' from DER, 106' left of centerline. Multiple trees 100' AGL/240' MSL, 5763' from DER, 509' right of centerline. Smokestack 100' MSL, 2310' from DER, 401' left of centerline, Multiple smokestacks up to 397' MSL, 2 NM from DER, 4175' right of centerline. Rwy 20,

Terrain 27' MSL, starting 347' from DER, 192' right of centerline, Trees 34' AGL/213' MSL, 5749' from DER. 1878' right of centerline.



TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES $\overline{\mathbf{V}}$

QUINTON VA NEW KENT COUNTY

NOTE: Rwv 10, trees beginning 358' from departure end

of runway 6' left of centerline up to 100' AGL/169' MSL Trees beginning 994' from departure end of runway, 602' right of centerline, up to 100' AGL/209' MSL. Trees

beginning 1396' from departure end of runway, 389' left of centerline, up to 100' AGL/209' MSL. Trees

beginning 3422' from departure end of runway, left and right of centerline, up to 100' AGL/239' MSL. Rwy 28, trees beginning 345' from departure end of runway, 296' right of centerline, up to 100' AGL/209' MSL, Trees beginning 367' from departure end of runway, 527' left of centerline, up to 100' AGL/209' MSL. Trees beginning

2134' from departure end of runway, left and right of

RICHLANDS, VA TAZEWELL COUNTY

centerline, 100' AGL/239' MSL.

TAKE-OFF MINIMUMS: Rwy 7, 300-1 or std. with a min. climb of 430' per NM to 3000, Rwy 25, 300-1 or std. with a min. climb of 280' per NM to 2900. DEPARTURE PROCEDURE: Rwy7, climb runway

heading to 4700 before proceeding southbound. Rwy 25, climb runway heading to 4100 before proceeding southbound.

RICHMOND, VA

CHESTERFIELD COUNTY TAKE-OFF MINIMUMS: Rwy 15, 800-1 or std. with a min. climb of 280' per NM to 1200. Rwy 33, 1200-1, or std. with a min. climb of 220' per NM to 1700.

DEPARTURE PROCEDURE: Rwy 15. climb runway heading to 1200' before proceeding on course. Rwy 33, climb runway heading to 1700' before proceeding on course. NOTE: Rwy 15, 18' AGL pole 1315' from departure end of

runway, 304' left of centerline, Rwv 33, 84' AGL tree 2399' from departure end of runway, 84' left of centerline.

RICHMOND INTL

NOTE: Rwy 2, cross departure end of runway at or above 30' AGL/195' MSL. Rwy 7, cross departure end of runway at or above 34' AGL/223' MSL. Rwy 16, cross

departure end of runway at or above 22' AGL/183' MSL. Rwy 20, cross departure end of runway at or above 35' AGL/193' MSL. Rwv 25, cross departure end of runway

at or above 20' AGL/176' MSL. Rwy 34, cross departure end of runway at or above 10' AGL/177' MSL.

RICHMOND/ASHLAND. VA HANOVER COUNTY MUNI (OFP)

ORIG 09239 (FAA) NOTE: Rwv 16, treees beginning 48' from DER 479'

left of centerline, up to 101' AGL/291' MSL. Poles beginning 1077' from DER, 36' left of centerline, up to 36' AGL/236' MSL. Pole 1120' from DER 166' right of centerline 30' AGL/230' MSL. Trees beginning 1307' from DER, 26' left of centerline, up to 108' AGL/298' MSL. Trees beginning 1431' from DER, 319' right of

centerline, up to 104' AGL/294' MSL, Rwv 34, road and trees beginning 149' from DER, 345' right of centerline. up to 47' AGL/247' MSL. Road and trees beginning 410' from DER, 386' left of centerline, up to 103' AGL/293' MSL. Poles beginning 660' from DER, on centerline, up to 39' AGL/239' MSL. Trees beginning 1402' from DER,

445' right of centerline, up to 100' AGL/290' MSL, Trees beginning 2714' from DER, 487' right of centerline, up

RIDGELY. MD

RIDGELY AIRPARK

to 104' AGL/304' MSL.

NOTE: Rwy 12, multiple trees beginning 592' from departure end of runway, 6' left of centerline, up to 100' AGL/160' MSL. Multiple trees beginning 239' from departure end of runway, 338' right of centerline, up to 100' AGL/160' MSL.

ROANOKE, VA

ROANOKE RGNL/ WOODRUM FIELD (ROA) AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: Rwys 6, 33, NA - obstacles. Rwy 24, std. w/min. climb of 216' per NM to 2600. DEPARTURE PROCEDURE: Rwy 15, climb heading 154° to intercept the ROA VORTAC R-122 to 4000

before proceeding on course. Rwy 24, climb west on I-

SZK LDA localizer course on 4200 to DIXXY Int/I-SZK 15.25 DME before proceeding on course. NOTE: Rwv 15, trees 1.18 NM from departure end of runway, 2122' left of centerline, 60' AGL/1321' MSL, Rwy 24, bush 86' from departue end of runway, 385' left of centerline, 4' AGL/1163' MSL, Tree 150' from

departure end of runway, 415' right of centerline, 60' AGL/1171'MSL, Tree 737' from departure end of runway, 454' right of centerline, 60' AGL/1179' MSL. Tree 1164' from departure end of runway, 726' right of centerline, 60' AGL/1206' MSL.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

ORIG 07354 (FAA) NOTE: Rwy 5, trees and antennas beginning 961' from

departure end of runway, 49' left of centerline, up to 83'

AGL/135' MSL. Trees beginning 2769' from departure end of runway, 5' right of centerline, up to 85' AGL/136' MSL. Rwy 23, trees beginning 514' from departure end of runway, 518' left of centerline, up to 68' AGL/118' MSL. Trees and antenna beginning 774' from departure end of runway, 303' right of centerline, up to 76' AGL/ 127' MSL. Trees beginning 2835' from departure end of runway, 186' right of centerline, up to 75' AGL/125' MSL.

Rwy 32, trailer, hangar and obstruction light beginning 120' from departure end of runway, 509' left of centerline,

up to 23' AGL/72' MSL. Trees beginning 2215' from 9295 departure end of runway, 140' left of centerline, up to 79' AGL/128'MSL EVDEPARTURE PROCEDURES TAKE-OFF MINIMUMS AND (OBSTACI



SALUDA. VA HUMMEL FIELD

DEPARTURE PROCEDURE: Rwvs 1.19. climb runway

heading to 1000 before turning on course. NOTE: Rwv 1, 23' AGL tree left of departure end of

runway, 65' AGL tree 663' from departure end of runway. 129' left of centerline, Rwy 19, 26' AGL tree 237' from departure end of runway, 116' right of centerline.

SOUTH BOSTON, VA WILLIAM M TUCK

TAKE-OFF MINIMUMS: Rwy 1, 300-1. Rwys 5, 23, NA.

NOTE: Rwv 1.72' AGL tower 324' from departure end of runway, 283' left of runway centerline. SOUTH HILL. VA

MECKLENBURG-BRUNSWICK RGNL TAKE-OFF MINIMUMS: Rwy 1, 300-1 or std. with a min.

climb of 250' per NM to 1000, Rwy 19, 300-1 or std. with a min, climb of 370' per NM to 1000'

DEPARTURE PROCEDURE: Rwvs 1.19, climb runway

heading to 1000 before proceeding on course.

STAFFORD, VA STAFFORD RGNI

DEPARTURE PROCEDURE: Rwv 15, climbing left turn

to 2000, intercept and proceed via BRV R-310 to BRV VORTAC, before proceeding on course. Rwy 33, climbing left turn to 2000, intercept and proceed via BRV

R-306 to BRV VORTAC, before proceeding on course. NOTE: Rwv 33, cross departure end of runway at or above 34' AGI /246' MSI

HARRISONBURG. VA SHENANDOAH VALLEY RGNL (SHD)

STAUNTON-WAYNESBORO-

AMDT 6 09239 (FAA)

TAKE-OFF MINIMUMS: Rwy 5, std. w/min. climb of 273' per NM to 3800, or 2200-21/2 for climb in visual

visual conditions DEPARTURE PROCEDURE: Rwy 5, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course. Rwy 23, climb

conditions. Rwy 23, standard, or 2200-21/2 for climb in

heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Ranlairport at or above 3300 before proceeding on course. NOTE: Rwy 5, trees 1720' from DER, 635' right of

centerline, up to 100' AGL/1279' MSL, Rwy 23, tree 679' from DER, 616' left of centerline, 35' AGL/1194' MSL.

STEVENSVILLE, MD BAY BRIDGE

TAKE-OFF MINIMUMS: Rwv 29, 500-3 or std. w/min.

NOTE: Rwv 11, road 354 from departure end of runway on centerline, 17' AGL/35' MSL. Multiple trees beginning 1471 from departure end of runway 32 left of centerline

climb of 317' per NM to 800.

up to 100' AGL/119' MSL Multiple trees beginning 1485' from departure end of runway, 16' left of centerline, up to

1143' from departure end of runway, 688' left of centerline.

up to 100' AGL/169' MSL. Powerline 1211' from departure end of runway, 717' right of centerline, 105' AGL/169

MSL. Powerline 2176' from departure end of runway, 259'

100' AGL/169' MSL. Powerline 3140' from departure end of runway, 1263' left of centerline, 105' AGL/174' MSL.

Rwy 22, road 536' from departure end of runway, 62' left of

centerline, 15' AGL/84' MSL. Trees 1403' from departure

end of runway, 765' left of centerline, up to 100' AGL/169'

centerline, 15' AGL/89' MSL. Trees 805' from departure end of runway, 423' right of centerline, up to 100' AGL/169'

MSL. Trees 3258' from departure end of runway, 57' right

NOTE: Rwv 2, vehicle on road 343' from departure end of

from departure end of runway, 632' right to 755' left of

runway, on centerline, 15' AGL/19' MSL, Boat masts 638'

centerline, up to 63' MSL. Rwy 20, buildings beginning

AGL/50' MSL, Rock wall at departure end of runway, 57'

TAKE-OFF MINIMUMS: Rwy 10, 300-114 or std. w/min. climb of 303' per NM to 500. Rwy 28, 300-1 or std. w/min.

NOTE: Rwy 10, terrain 6' from departure end of runway, 20' left of centerline, up to 135' MSL. Terrain 29' from departure end of runway, 281' left of centerline, up to 139'

MSL. Rwy 28, terrain beginning 12' from departure end of runway, 5' right of centerline, up to 151' MSL.

7' from departure end of runway, 206' left of centerline, 45'

MSL. Trees 3595' from departure end of runway, 792'

right of centerline, up to 100' AGL/174' MSL, Rwv 25.

road 198' from departure end of runway, 33' right of

of centerline, up to 100' AGL/174' MSL.

right of centerline, 4' AGL/8' MSL.

TAPPAHANNOCK-ESSEX COUNTY

left of centerline, 105' AGL/169' MSL, Trees 2430' from

departure end of runway, 118' right of centerline, up to

SUFFOLK, VA

SUFFOLK EXECUTIVE

TAKE-OFF MINIMUMS: Rwvs 4.7.22.300-1. Rwv 25.

300-1 or std. w/a min_climb o f260' per NM to 300. Alternatively, with standard takeoff minimums and a normal

200'/NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway

NOTE: Rwv 4, trees 1050' from departure end of runway. 250' left of centerline, up to 100' AGL /169' MSL. Trees 1076' from departure end of runway, 105' left of centerline. up to 100' AGL/169' MSL. Powerline 1698' from departure end of runway, 825' right of centerline, 105' AGL/169

MSL. Powerline 3056' from departure end of runway, 524'

TANGIER, VA

TANGIER ISLAND (TGI)

TAPPAHANNOCK, VA

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

climb of 366' per NM to 500.

ORIG 09015 (FAA)

right of centerline, 105' AGL/174' MSL, Rwv 7, trees

AGI /410' MSI

100' AGL/119' MSL. Rwv 29, twin bridges 2,25 NM from

departure end of runway, 2767' right of centerline, 410'



NOTE: Rwv 4. trees beginning 1254' from DER, 741'

beginning 1814' from DER, 79' right of centerline, up

to 100' AGL/134' MSL. Rwv 10. trees beginning 1252'

from DER, 818' left of centerline, up to 100' AGL/124'

MSL. Rwv 17, trees beginning 169' from DER, 218' left of centerline, up to 100' AGL/119' MSL, Rwy 22, trees beginning 793' from DER, 315' left of centerline.

up to 100' AGL/129' MSL. Rwv 28, trees beginning 945' from DER, 495' right of centerline, up to 100'

AGL/139' MSL. Rwv 35, trees beginning 3' from DER.

394' left of centerline, up to 100' AGL/124' MSL. Trees

beginning 21' from DER, 219' right of centerline, up to

DEPARTURE PROCEDURE: Climb straight ahead to

NOTE: Rwv 15, trees 436' from DER 518' right of

centerline, 100' AGL/439' MSL, Vehicle on road 647'

Trees 1034' from DER 763' left of centerline 100'

AGL/449' MSL. Trees 1924' from DER, 781' right of centerline 100' AGL /459' MSL Trees beginning 2239'

from DER, 41' left of centerline, up to 100' AGL/459'

from DER, 649' right of centerline, 15' AGL/354' MSL.

left of centerline, up to 100' AGL/109' MSL. Trees

WALLOPS ISLAND, VA

ORIG 09127 (FAA)

100' AGI /124' MSI

500 before proceeding on course.

WARRENTON-FAUQUIER (HWY)

WAKEFIELD, VA

WAKEFIELD MUNI

WARRENTON, VA

ORIG 09099 (FAA)

WALLOPS FLIGHT FACILITY (WAL)

WEST POINT, VA

MIDDLE PENINSULA RGNL (FYJ)

ORIG 08157 (FAA)

NOTE: Rwy 10, multiple trees beginning 86' from departure end of runway, left and right of centerline, up to 100' AGL/129' MSL. Rwv 28. multiple trees beginning 33'

from departure end of runway left and right of centerline up to 100' AGL/119' MSL. Ship mast 3427' from departure end of runway, left and right of centerline. 135' AGL/135' WESTMINSTER.MD

CARROLL COUNTY RGNL/JACK B. POAGE

FIFI D

TAKE-OFF MINIMUMS: Rwv 16 400-1 or std with a min climb of 210' per NM to 1300, Rwy 34, 300-1 or std, with a min_climb of 320' per NM to 1000 NOTE: Rwv 16.87' AGL trees 644' from departure end of runway, Rwy 34, 102' AGL trees 116' from departure end

of runway 220' right of centerline

CLEARVIEW AIRPARK (2W2)

ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: Rwv 32, 300-21/4 or std. w/ min. climb of 290' per NM to 1200.

NOTE: Rwv 14. vehicles and aircraft on road/taxiwav 14' from DER, 47' right to left of centerline, 15' AGL/834' MSL, Trees beginning 35' from DER, 200' left of

centerline, up to 100' AGL/939' MSL. Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/919' MSL. Rwv 32, vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL. Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL. Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

WILLIAMSBURG, VA

WILLIAMSBURG-JAMESTOWN TAKE-OFF MINIMUMS: Rwv 31, 300-1.

MSL. Rwy 33, trees beginning 1272' from DER, 59'

right of centerline, up to 41' AGL/370' MSL. Trees beginning 2610' from DER, 116' left of centerline, up to 74' AGI /413' MSI WASHINGTON. DC RONALD REAGAN WASHINGTON

NATIONAL

TAKE-OFF MINIMUMS: Rwy 22, 400-21/2 or std. with a min, climb of 210' per NM to 500, Rwv 33, 700-3 or

std. with a min. climb of 260' per NM to 700. Rwy 1, 600-2 or std. with a min. climb of 370' per NM to 700. DEPARTURE PROCEDURE: Rwv 1. left turn as soon as practicable, intercept DCA R-328. Climb to 5000 or as assigned, Rwv 19, climb heading 184° to 500 before turning right. Rwy 33, intercept DCA R-328.

Climb to 5000 or as assigned. NOTE: Prohibited area, P-56, 1.5 NM north of airport.

WASHINGTON DULLES INTL (IAD) AMDT 1 08325 (FAA)

NOTE: Rwv 1L, tower 1918' from departure end of

AGL/307'MSL.

runway, 680' left of centerline, 56' AGL/330' MSL. Rwy 1C, tree 2814' from departure end of runway, 1030' left of centerline, 86' AGL/345' MSL, Rwv 1R. post 12' from departure end of runway, 223' right of centerline, 8' AGL/294' MSL, Rwy 12, tree 520' from departure end of runway, 604' left of centerline, 28'

Rwy 30, trees beginning 161' from departure end of runway, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from departure end of runway. 9295 600' right of centerline, up to 64' AGL/383' MSL.





NEW CASTLE

TAKE-OFF MINIMUMS: Rwv 19, 300-1 or std. w/min.

WILMINGTON, DE

climb of 266' per NM to 300.

NOTE: Rwv 1, multiple trees beginning 751' from departure end of runway, 32' left of centerline, up to 59' AGI /120 MSI tree 1219 from departure end of runway 482 right of centerline 57 AGL /118 MSL bush 118' from departure end of runway, 385' left of centerline 4' AGI /65' MSI Rwv 9 multiple trees beginning 1229' from departure end of runway, 30' right of centerline up to 62' AGL/133' MSL, tree 975' from departure end of runway 66' left of centerline 53' AGL/124' MSL, light pole 948' from departure end of runway 596 right of centerline 44 AGL /115 MSL tree 1740' from departure end of runway, 458' left of centerline, 83' AGL/134' MSL, light pole 945' from departure end of runway, 316' right of centerline, 38' AGL/109' MSL, rod on building 916' from departure end of runway 457' left of centerline 29' AGL /100' MSL. Rwv 14, obstacle light 553' from departure end of runway, 440' left of centerline, 29' AGL/103' MSL. rod on obstacle light 606' from departure end of runway, 615' left of centerline, 19' AGL/93' MSL, Rwy 19. antenna on obstruction light tower 4469' from departure end of runway, 1684' right of centerline, 153' AGL/228' MSL, tree 1575' from departure end of runway 850 right of centerline 45 AGL /120 MSL obstruction light on sign 971' from departure end of runway, 448' left of centerline, 28' AGL/103' MSL. Rwy 27, tree 697 from departure end of runway, 533 left of centerline, 68' AGL/147' MSL. Tree 1110' from departure end of runway 584' right of centerline 38' AGL/117' MSL, pole 793' from departure end of runway, 615' right of centerline, 28' AGL/107' MSL. bush 408' from departure end of runway, 415' left of

centerline, 12' AGL/91' MSL. Rwy 32, tree 711' from departure end of runway, 207' right of centerline, 29' AGL/104' MSL, tree 1162' from departure end of runway, 83' right of centerline, 32' AGL/107' MSL.

WINCHESTER. VA

WINCHESTER RGNL

TAKE-OFF MINIMUMS: Rwv 32, 800-2 or std. with a min, climb of 210' per NM to 1700. DEPARTURE PROCEDURE: Rwv 32, climb runway

heading to 1700 before turning on course.

WISE. VA

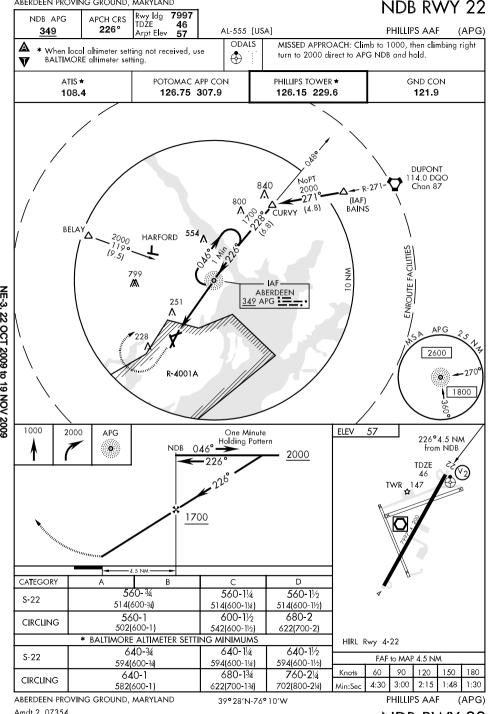
LONESOME PINE

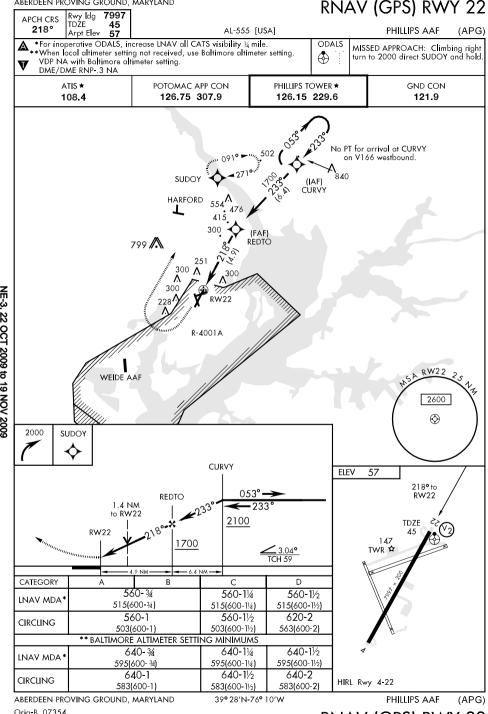
TAKE-OFF MINIMUMS: Rwv 24, 1800-3 or std. with a min, climb of 400' per NM to 4700.

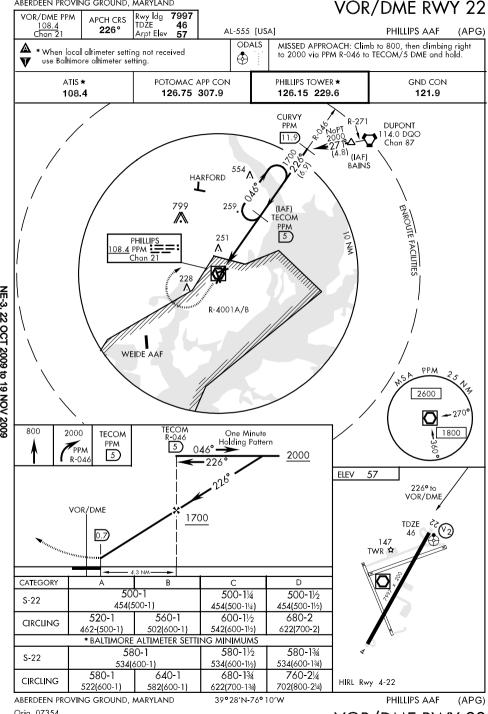
DEPARTURE PROCEDURE: Rwv 6, climb on runway heading to 3800 before proceeding on course.

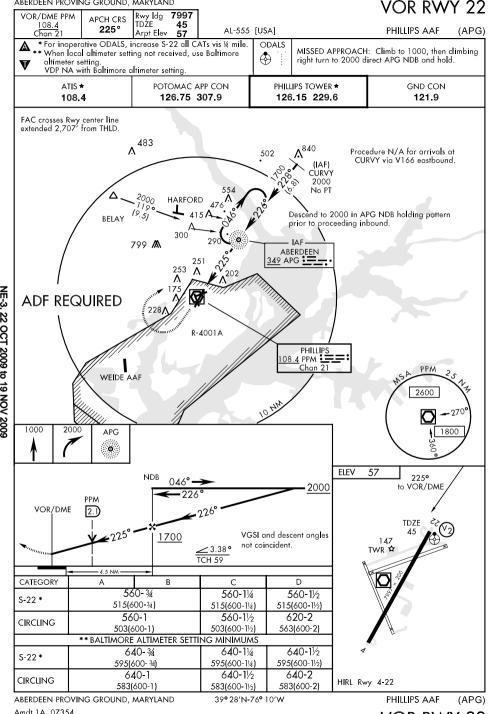
Rwy 24, climb on runway heading to 4500 before

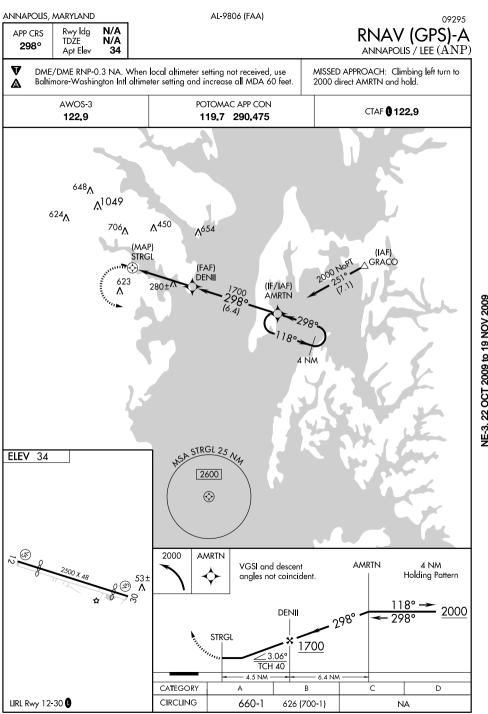
proceeding on course.

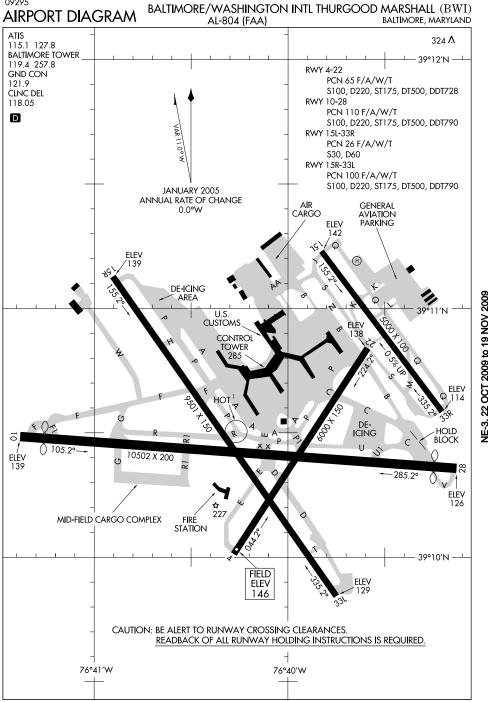


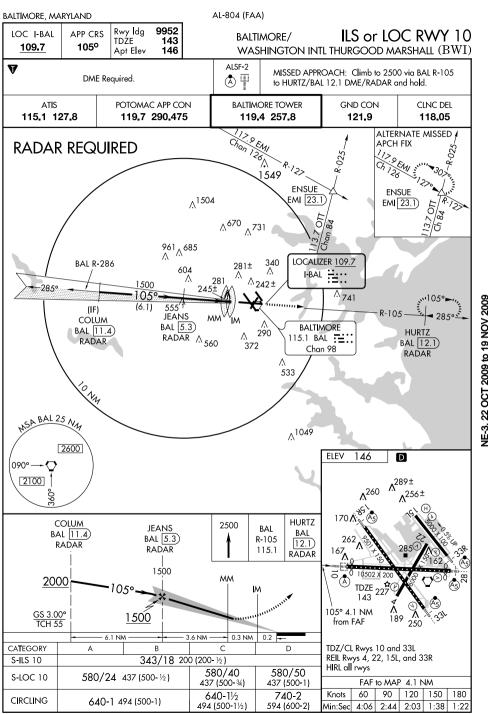


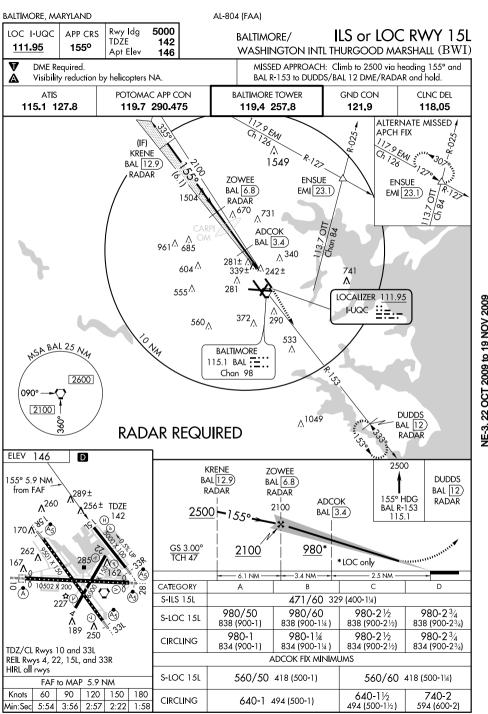


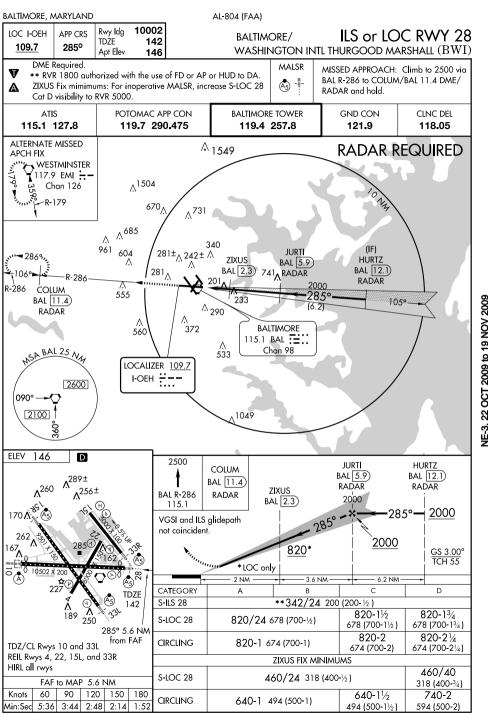


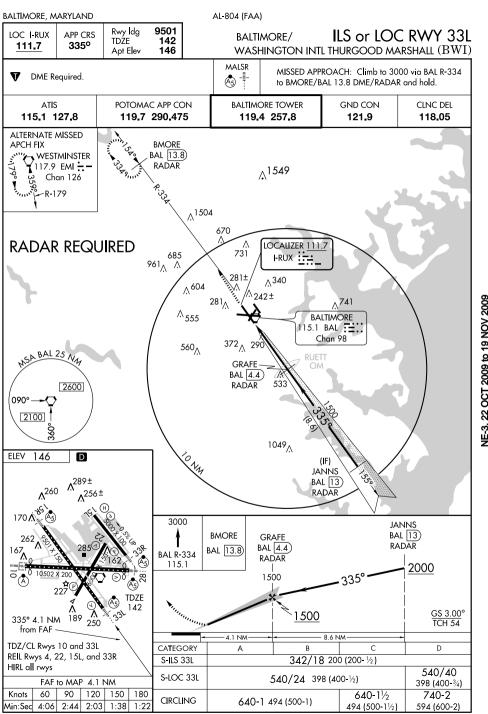


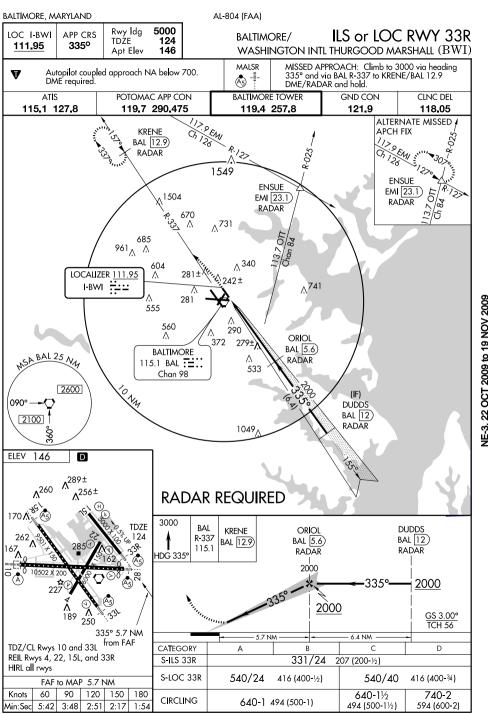


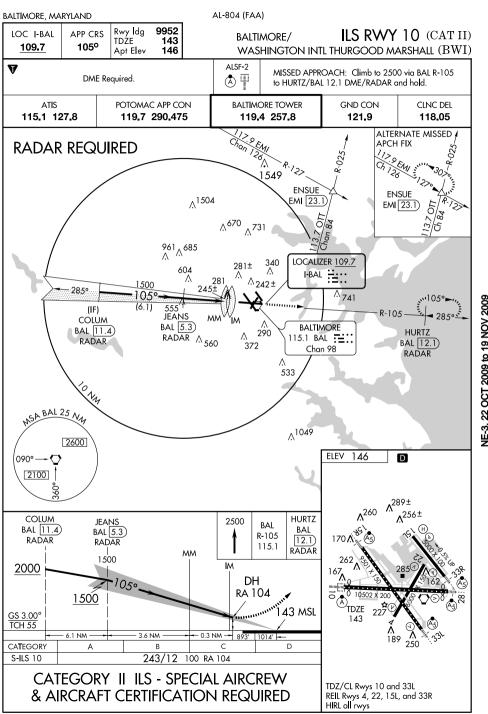


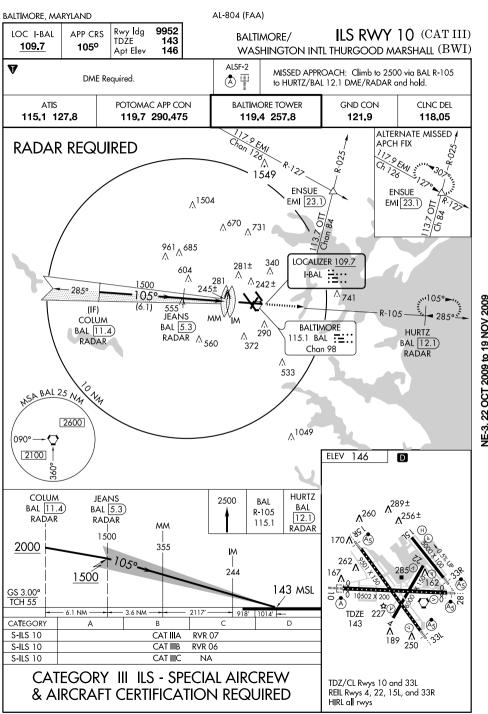


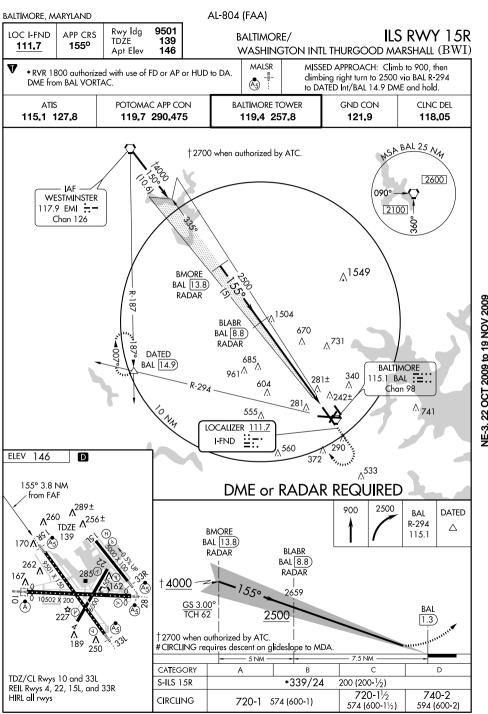


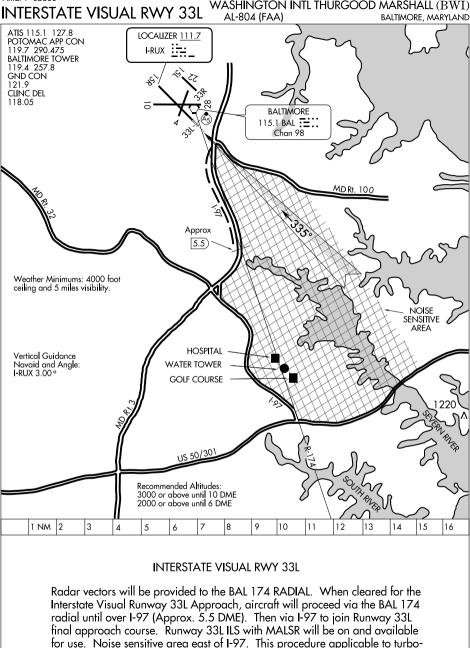












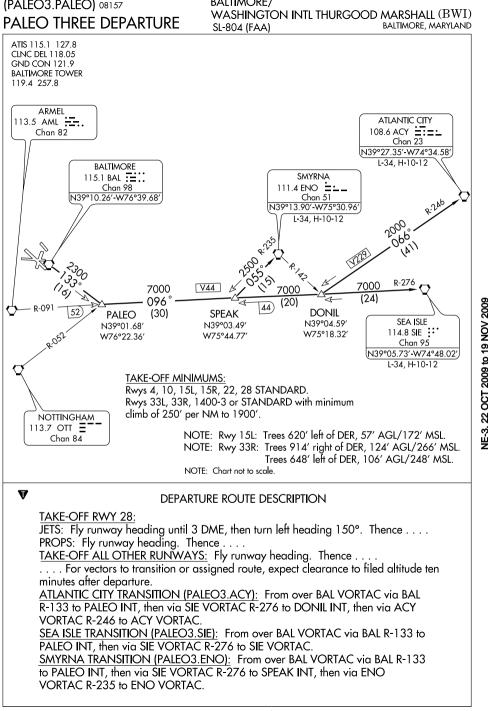
jets arriving via OTT VORTAC.

(OTT.OTT6) 08101 ST-804 (FAA) NOTTINGHAM SIX ARRIVAL BALTIMORE, MARYLAND CARROLL COUNTY 6 POTOMAC APP CON MARTIN STATE 6 RGNI 128.35 270.275 BALTIMORE/ C **BALTIMORE ATIS** BAITIMORE WASHINGTON INTL 1151 115.1 BAL :=: THURGOOD MARSHALL Chan 98 ARMFI **DEALE** 113.5 AML :-. RIPKN N38°47 87' N38° 55.90′ Chan 82 W76°32.01′ W76° 34.05′ VERTICAL NAVIGATION PLANNING INFORMATION CASANOVA Expect to cross RAVNN 1900 at 6000'. N38° 48.27' 071° Chan 110 W76° 31.08′ R-276 (11) N38°38.47′-W77°51.93′ 096° L-29-34-36, H-10-12 NOTTINGHAM 5500 VERTICAL NAVIGATION (30) 091° 113.7 OTT = PLANNING Chan 84 (23) INFORMATION N38°42.35′-W76°44.68′ Expect to cross at FL 190. SACCO VERTICAL NAVIGATION N38°40.23' PLANNING INFORMATION W77°22.90′ Expect to cross at VERTICAL NAVIGATION or below 9000'. PLANNING INFORMATION R-084 Expect to cross SABB 23 N38°22.91′ W77°08.25′ at 16,000'. **BROOKE** VERTICAL NAVIGATION 18/ 114.5 BRV PLANNING INFORMATION Chan 92 Expect to cross at 15,000'. N38°20.18′-W77°21.17′ **PEGBY** VERTICAL NAVIGATION A N38° 04.72′ W77° 12.06′ PLANNING INFORMATION NOTE: Expect to cross at 15,000' All part 91, 101, 103, 105, **OGATE** and 280 Kts. 125, 133, 135 and 137 flight N38° 03.48′ W77° 31.07′ operations are prohibited on the NOTE: CASANOVA TRANSITION. This STAR applicable to turbojet aircraft only. RICHMOND 114.1 RIC :-. FLAT ROCK 113.3 FAK _____ Chan 88 N37°30.14′-W77°19.22′ N37°31.71′-W77°49.69′ L-34-36, H-10-12 L-36, H-10-12 NOTE: Chart not to scale. ARRIVAL ROUTE DESCRIPTION CASANOVA TRANSITION (CSN.OTT6): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Thence FLAT ROCK TRANSITION (FAK.OTT6): From over FAK VORTAC via FAK R-031 and BRV R-214 to BRV VORTAC, then via OTT R-242 to OTT VORTAC. Thence. RICHMOND TRANSITION (RIC.OTT6): From over RIC VORTAC via RIC R-018 to SABBI INT, then via OTT R-234 to OTT VORTAC. Thence From over OTT VORTAC via OTT R-071 to RAVNN INT, then via

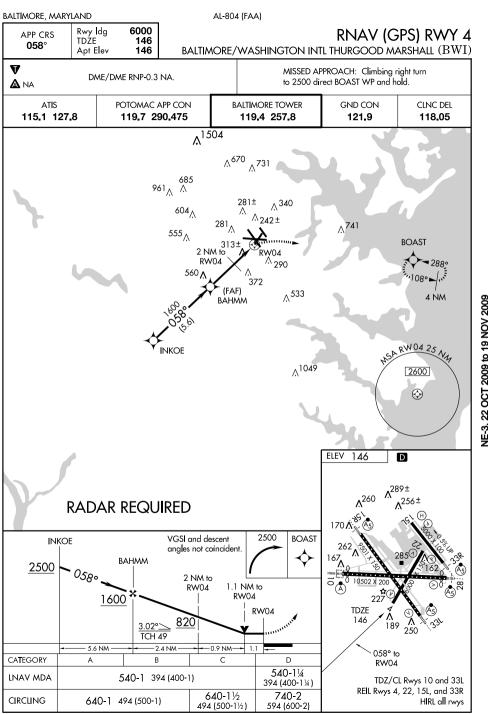
BAL R-174 to RIPKN INT. Expect radar vectors to final approach course

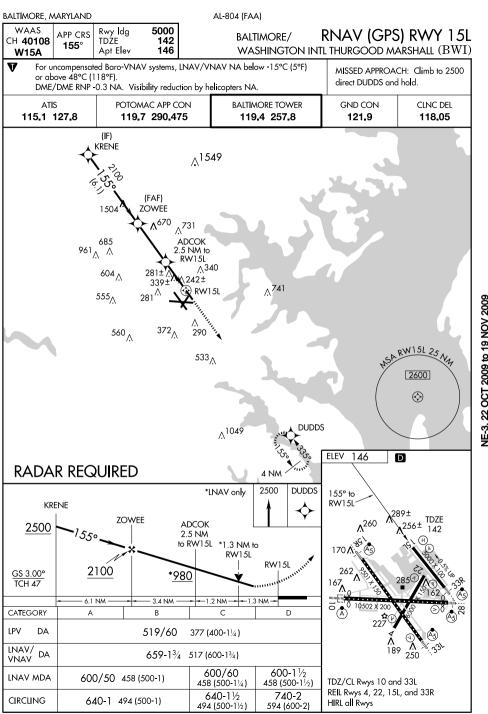
after passing RIPKN INT.

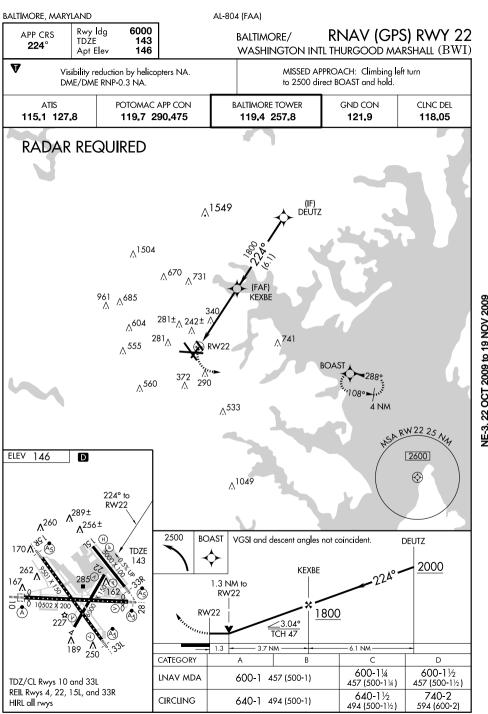
22 OCT 2009 to 19 NOV 2009

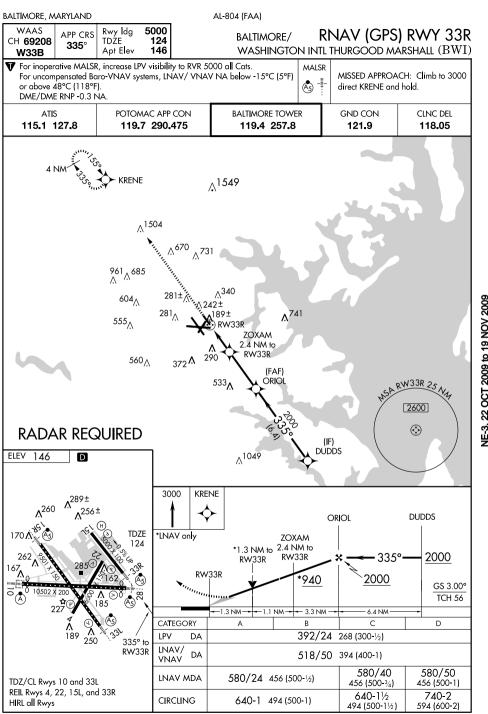


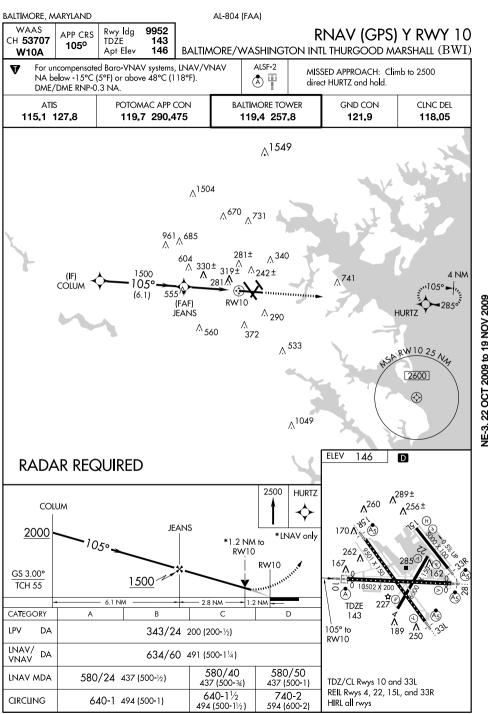
(RAVNN.RAVNN3) 09239 ST-804 (FAA) RAVNN THREE ARRIVAL (RNAV) BALTIMORE, MARYLAND POTOMAC APP CON MARTIN STATE 🌣 128.35 270.275 **BALTIMORE ATIS** ZAKTO 1151 BALTIMORE/ LURRL WASHINGTON INTL 29go THURGOOD MARSHALL LANDING RWY 10: Depart ZAKTO heading 299° for vectors to final approach course. NAVEY **VOLEY** NOTTINGHAM CASANOVA OTT SACCO **CSN** 9000 **REXEE** 16000 **UDUDE** Expect to cross 6000 **FIMBO** RAVNN 12000 at FL190. 012 14000 16000 6000 9000 12000 14000 16000 097 097°H 16000 097 (13)097° (7)096° (3)(23)NICCO 8 NM 12000 VE-3 22 OCT 2009 to 19 NOV 2009 LANDING BWI RWY 33 or SABBI LANDING MTN RWYs 15/33: Expect to cross After RAVNN expect radar at 15000. vectors to final approach course. NOTE: RADAR REQUIRED NOTE: This STAR applicable to turbojet aircraft only. PEGBY NOTE: All part 91, 101, 103, 105, 125, 133, and 137 flight operations are 11 NM prohibited on the CASANOVA TRANSITION. NOTE: DME/DME/IRU or GPS Required. NOTE: RNAV 1. NOTE: Maintain last ATC assigned altitude until cleared to "DESCEND VIA THE RAVNN THREE ARRIVAL". ARRIVAL ROUTE DESCRIPTION CASANOVA TRANSITION (CSN.RAVNN3): RICHMOND TRANSITION (RIC.RAVNN3): From OTT VORTAC via 072° track to RAVNN, thence as depicted to ZAKTO, **RICHMOND** depart ZAKTO heading 299° for vectors RIC to final approach course. NOTE: Chart not to scale.

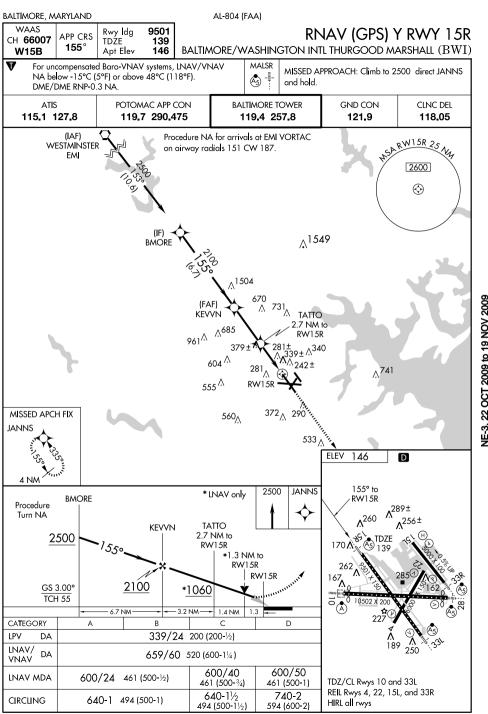


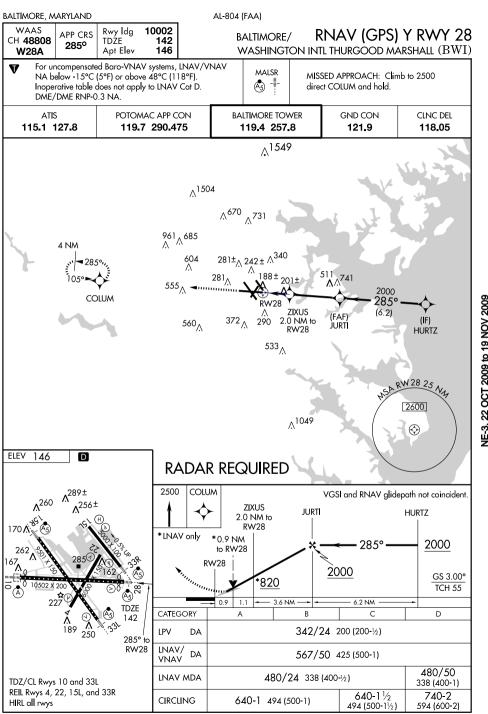


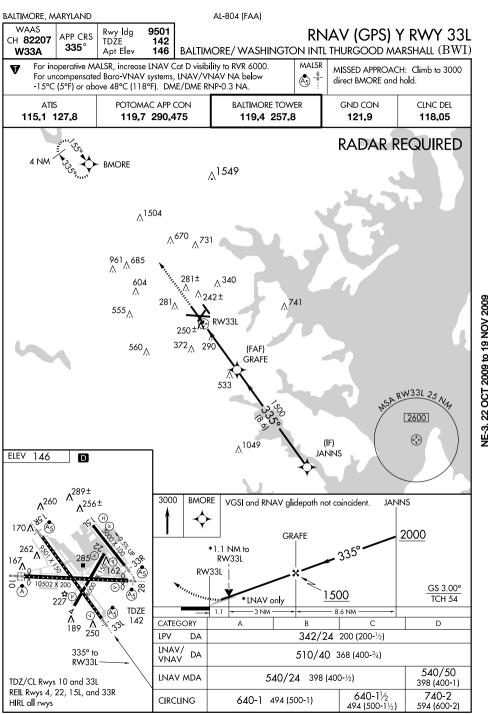


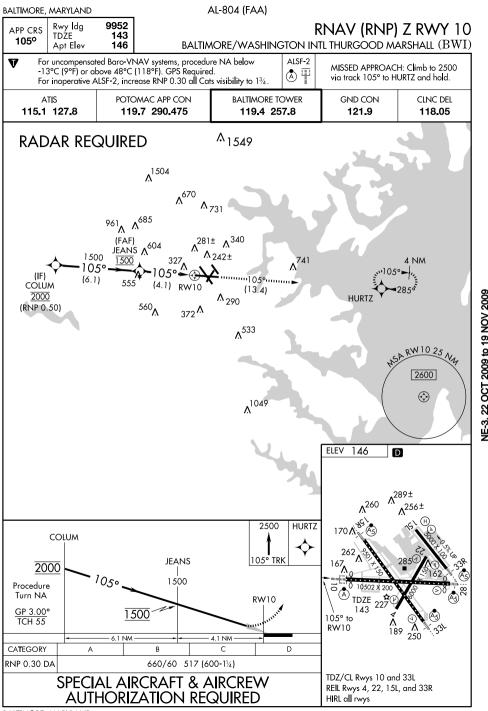


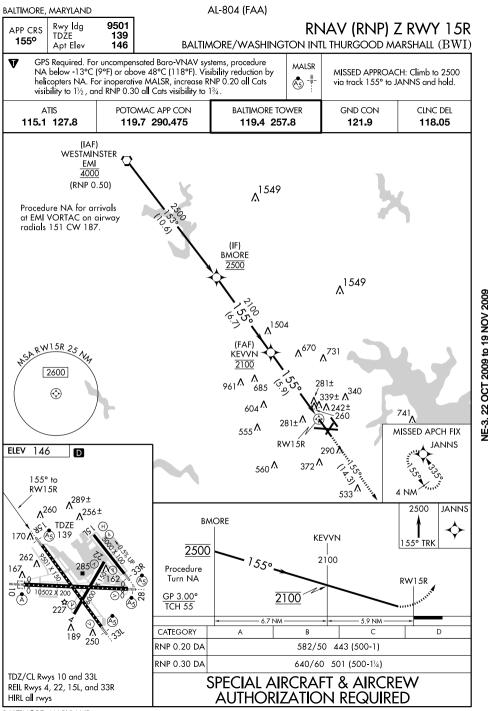


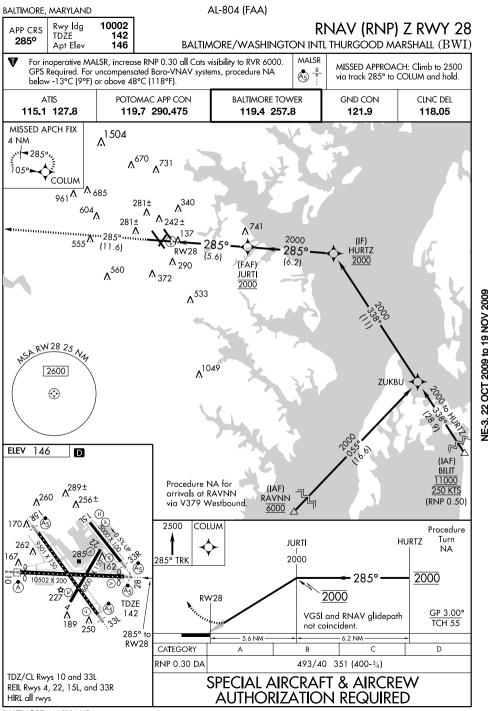


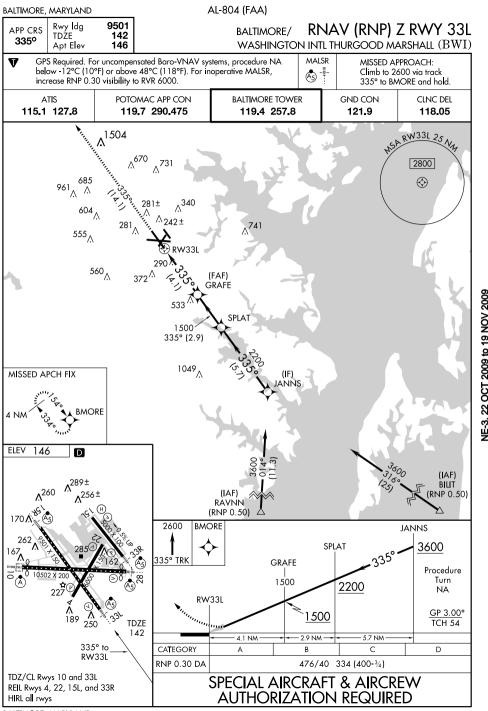


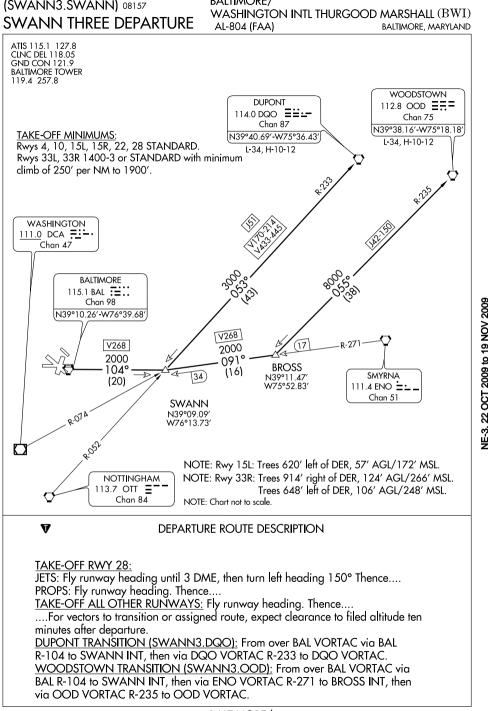


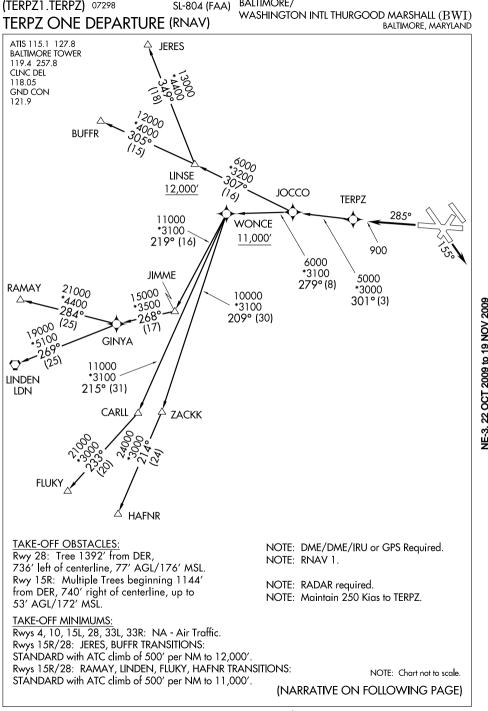


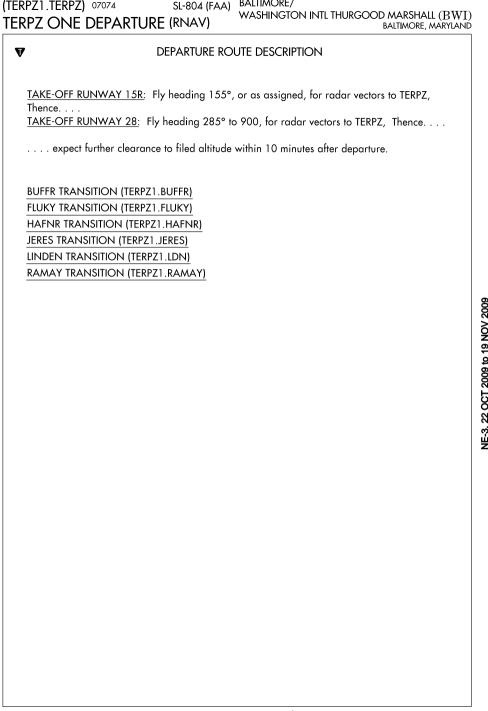


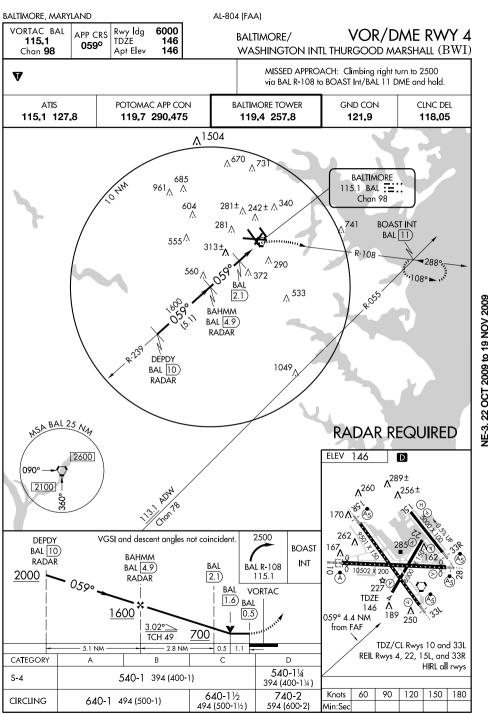


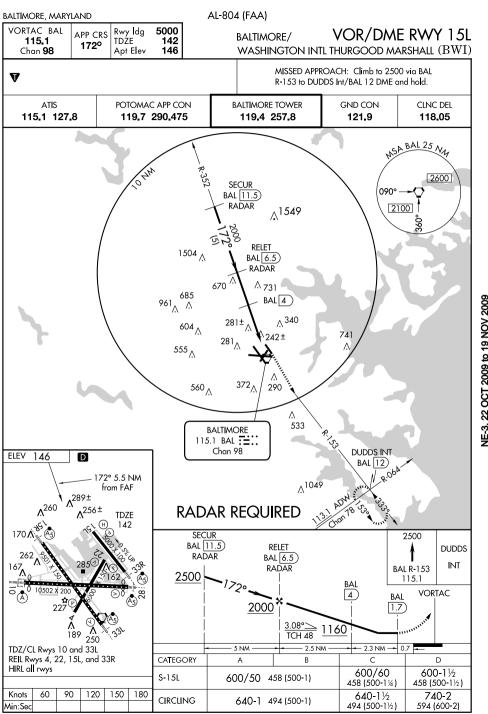


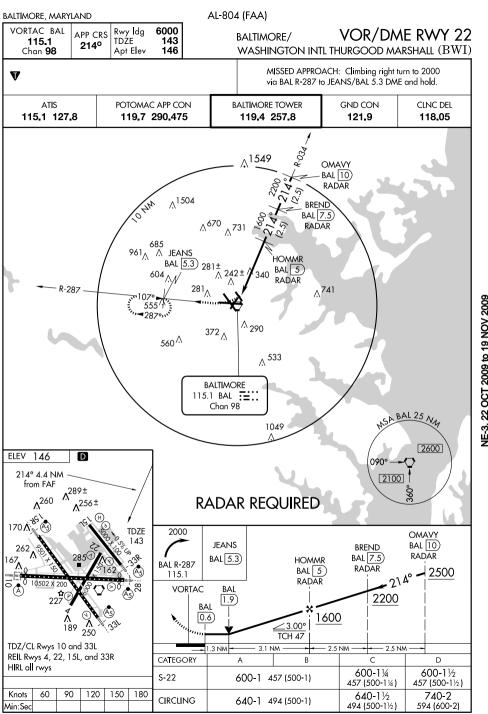


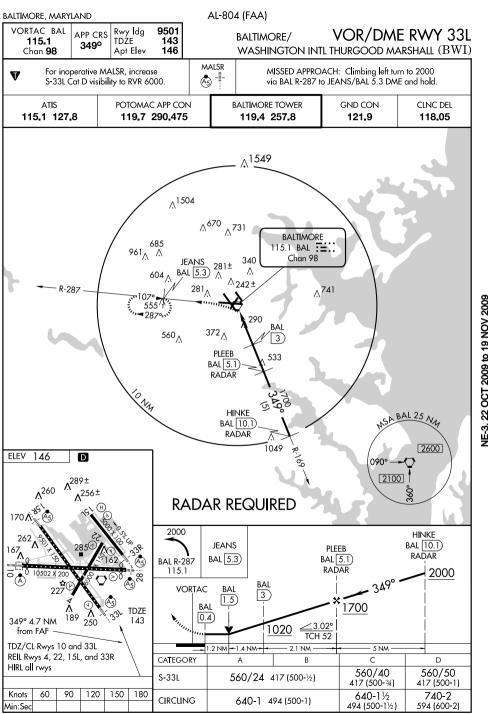


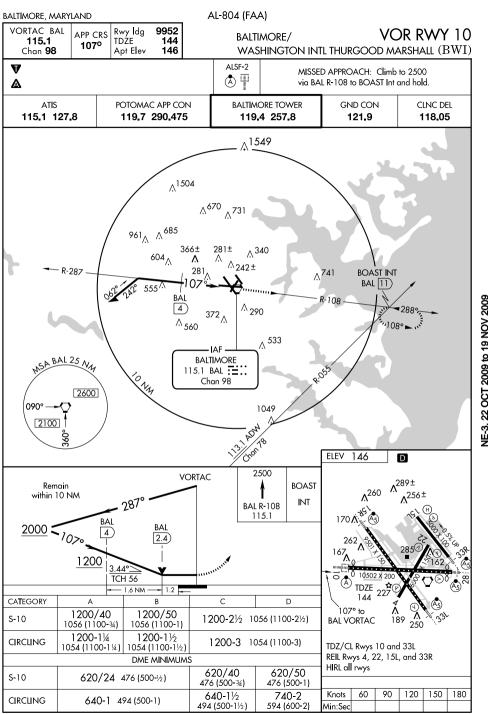


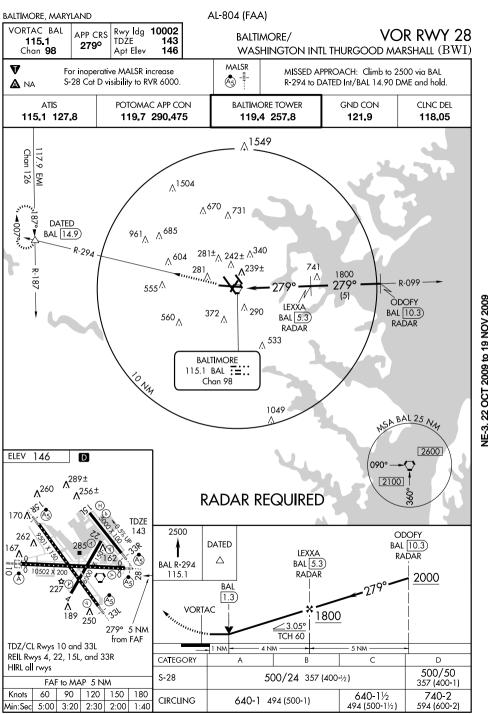


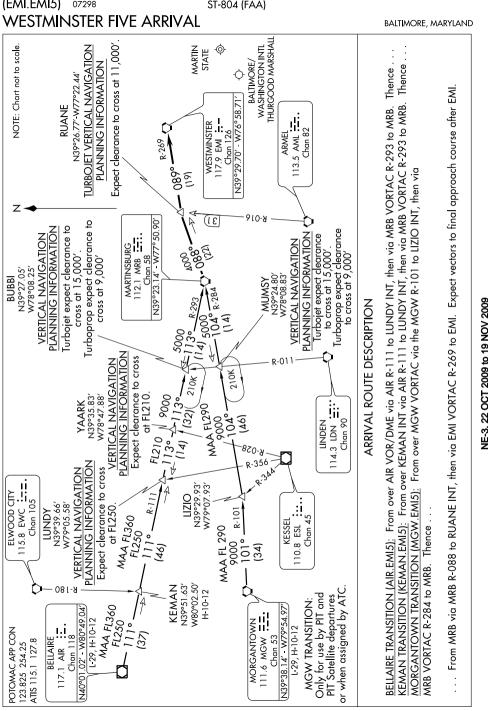


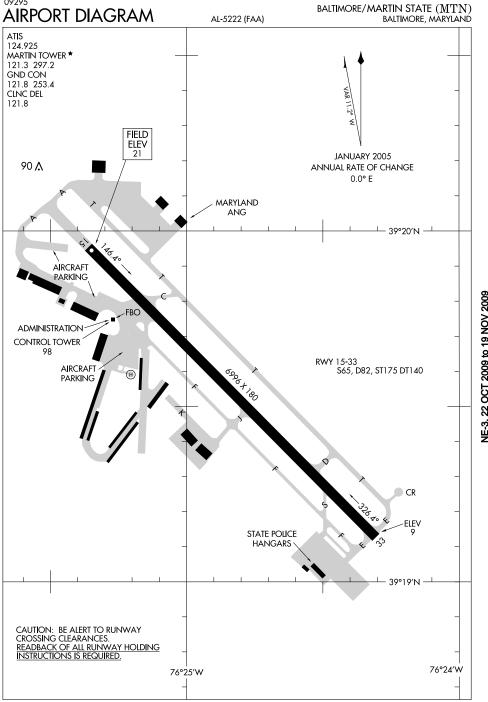




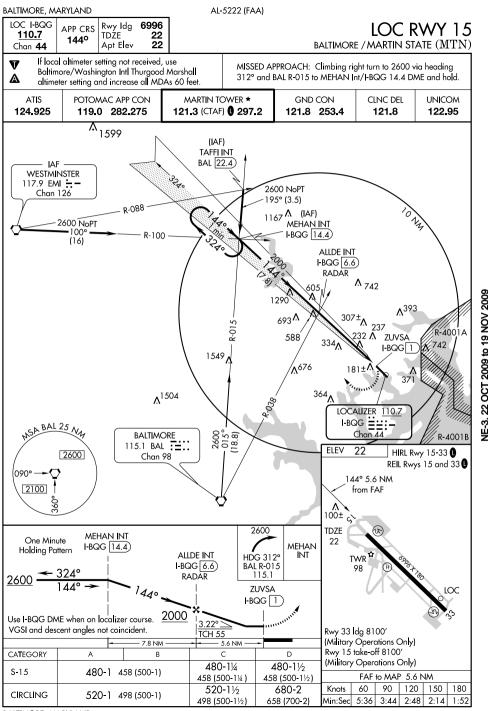








VE-3 22 OCT 2009 to 19 NOV 2009



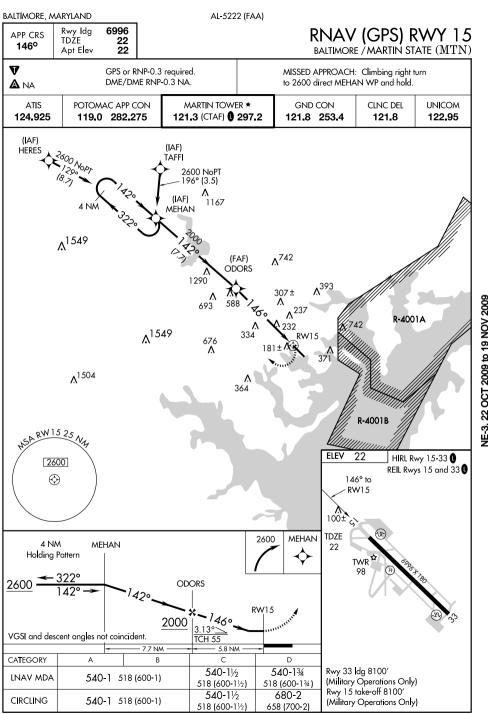
(OTT.OTT6) 08101 ST-804 (FAA) NOTTINGHAM SIX ARRIVAL BALTIMORE, MARYLAND CARROLL COUNTY 6 POTOMAC APP CON MARTIN STATE 6 RGNI 128.35 270.275 BALTIMORE/ C **BALTIMORE ATIS** BAITIMORE WASHINGTON INTL 1151 115.1 BAL :=: THURGOOD MARSHALL Chan 98 ARMFI **DEALE** 113.5 AML :-. RIPKN N38°47 87' N38° 55.90′ Chan 82 W76°32.01′ W76° 34.05′ VERTICAL NAVIGATION PLANNING INFORMATION CASANOVA Expect to cross RAVNN 1900 at 6000'. N38° 48.27' 071° Chan 110 W76° 31.08′ R-276 (11) N38°38.47′-W77°51.93′ 096° L-29-34-36, H-10-12 NOTTINGHAM 5500 VERTICAL NAVIGATION (30) 091° 113.7 OTT = PLANNING Chan 84 (23) INFORMATION N38°42.35′-W76°44.68′ Expect to cross at FL 190. SACCO VERTICAL NAVIGATION N38°40.23' PLANNING INFORMATION W77°22.90′ Expect to cross at VERTICAL NAVIGATION or below 9000'. PLANNING INFORMATION R-084 Expect to cross SABB 23 N38°22.91′ W77°08.25′ at 16,000'. **BROOKE** VERTICAL NAVIGATION 18/ 114.5 BRV PLANNING INFORMATION Chan 92 Expect to cross at 15,000'. N38°20.18′-W77°21.17′ **PEGBY** VERTICAL NAVIGATION A N38° 04.72′ W77° 12.06′ PLANNING INFORMATION NOTE: Expect to cross at 15,000' All part 91, 101, 103, 105, **OGATE** and 280 Kts. 125, 133, 135 and 137 flight N38° 03.48′ W77° 31.07′ operations are prohibited on the NOTE: CASANOVA TRANSITION. This STAR applicable to turbojet aircraft only. RICHMOND 114.1 RIC :-. FLAT ROCK 113.3 FAK _____ Chan 88 N37°30.14′-W77°19.22′ N37°31.71′-W77°49.69′ L-34-36, H-10-12 L-36, H-10-12 NOTE: Chart not to scale. ARRIVAL ROUTE DESCRIPTION CASANOVA TRANSITION (CSN.OTT6): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Thence FLAT ROCK TRANSITION (FAK.OTT6): From over FAK VORTAC via FAK R-031 and BRV R-214 to BRV VORTAC, then via OTT R-242 to OTT VORTAC. Thence. RICHMOND TRANSITION (RIC.OTT6): From over RIC VORTAC via RIC R-018 to SABBI INT, then via OTT R-234 to OTT VORTAC. Thence From over OTT VORTAC via OTT R-071 to RAVNN INT, then via

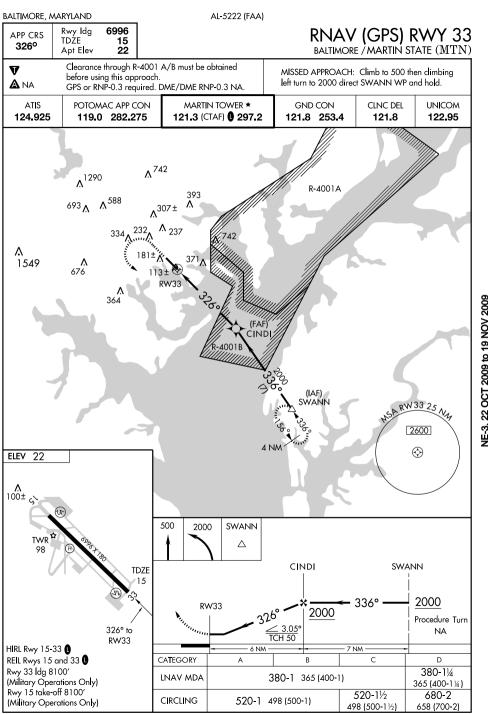
BAL R-174 to RIPKN INT. Expect radar vectors to final approach course

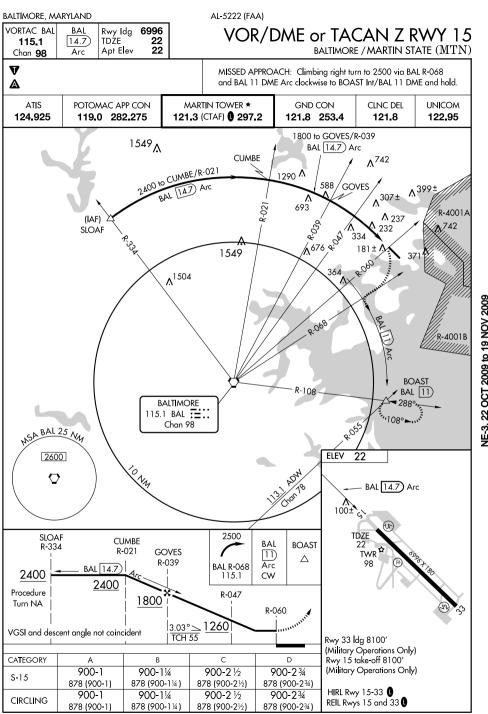
after passing RIPKN INT.

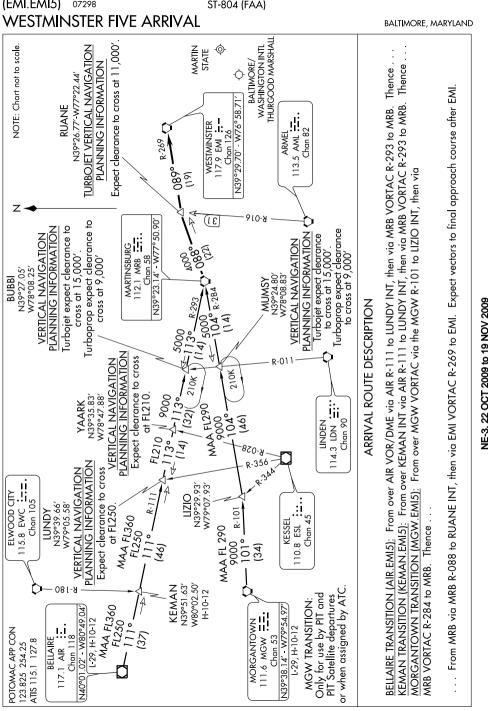
22 OCT 2009 to 19 NOV 2009

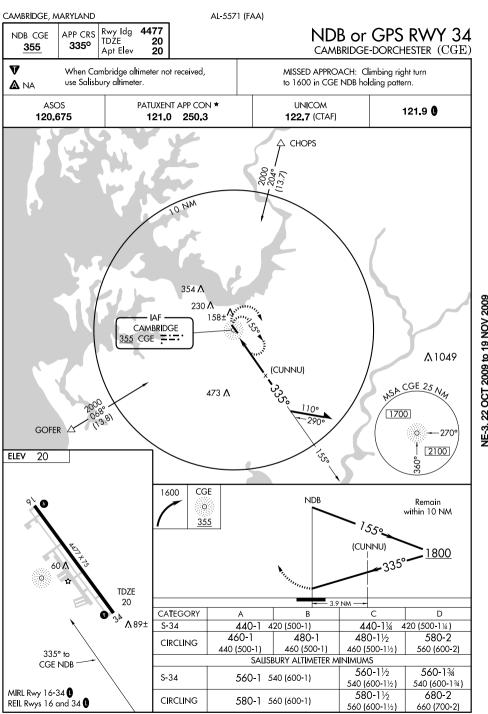
(RAVNN.RAVNN3) 09239 ST-804 (FAA) RAVNN THREE ARRIVAL (RNAV) BALTIMORE, MARYLAND POTOMAC APP CON MARTIN STATE 🌣 128.35 270.275 **BALTIMORE ATIS** ZAKTO 1151 BALTIMORE/ LURRL WASHINGTON INTL 29go THURGOOD MARSHALL LANDING RWY 10: Depart ZAKTO heading 299° for vectors to final approach course. NAVEY **VOLEY** NOTTINGHAM CASANOVA OTT SACCO **CSN** 9000 **REXEE** 16000 **UDUDE** Expect to cross 6000 **FIMBO** RAVNN 12000 at FL190. 012 14000 16000 6000 9000 12000 14000 16000 097 097°H 16000 097 (13)097° (7)096° (3)(23)NICCO 8 NM 12000 VE-3 22 OCT 2009 to 19 NOV 2009 LANDING BWI RWY 33 or SABBI LANDING MTN RWYs 15/33: Expect to cross After RAVNN expect radar at 15000. vectors to final approach course. NOTE: RADAR REQUIRED NOTE: This STAR applicable to turbojet aircraft only. PEGBY NOTE: All part 91, 101, 103, 105, 125, 133, and 137 flight operations are 11 NM prohibited on the CASANOVA TRANSITION. NOTE: DME/DME/IRU or GPS Required. NOTE: RNAV 1. NOTE: Maintain last ATC assigned altitude until cleared to "DESCEND VIA THE RAVNN THREE ARRIVAL". ARRIVAL ROUTE DESCRIPTION CASANOVA TRANSITION (CSN.RAVNN3): RICHMOND TRANSITION (RIC.RAVNN3): From OTT VORTAC via 072° track to RAVNN, thence as depicted to ZAKTO, **RICHMOND** depart ZAKTO heading 299° for vectors RIC to final approach course. NOTE: Chart not to scale.

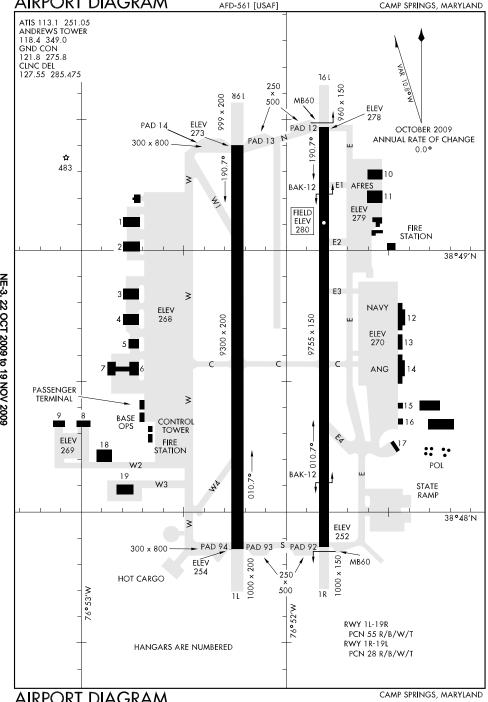


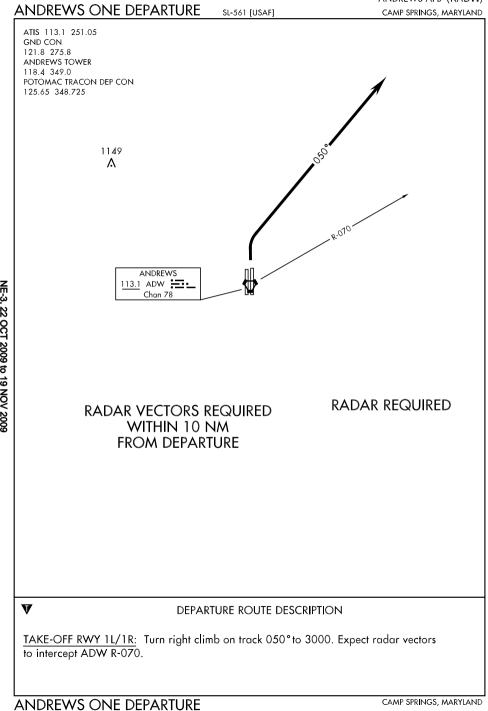








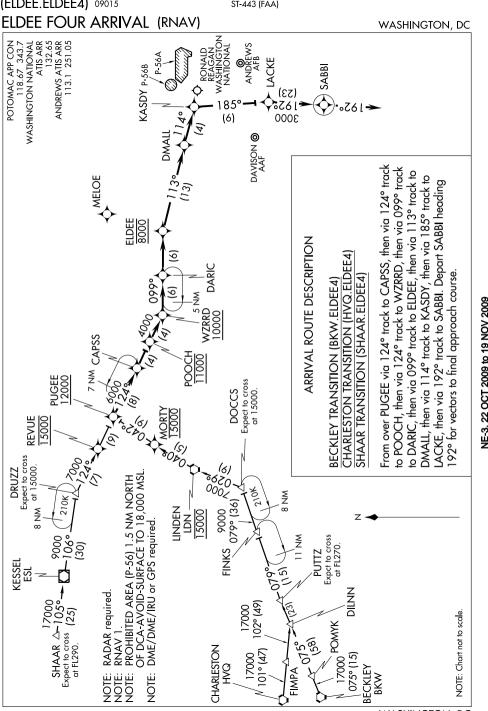


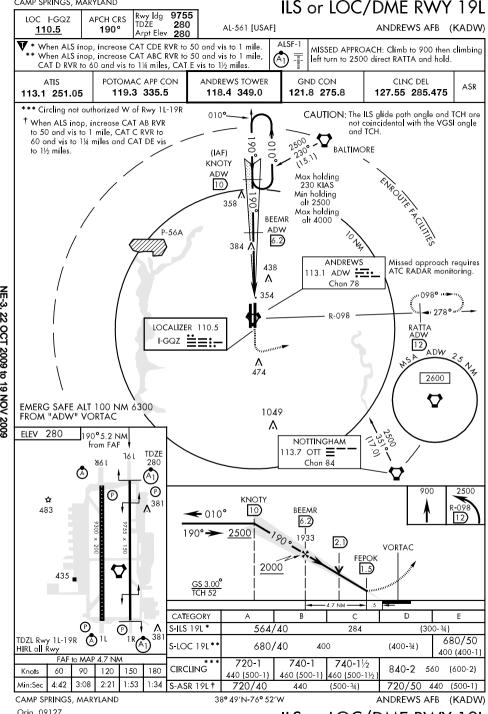


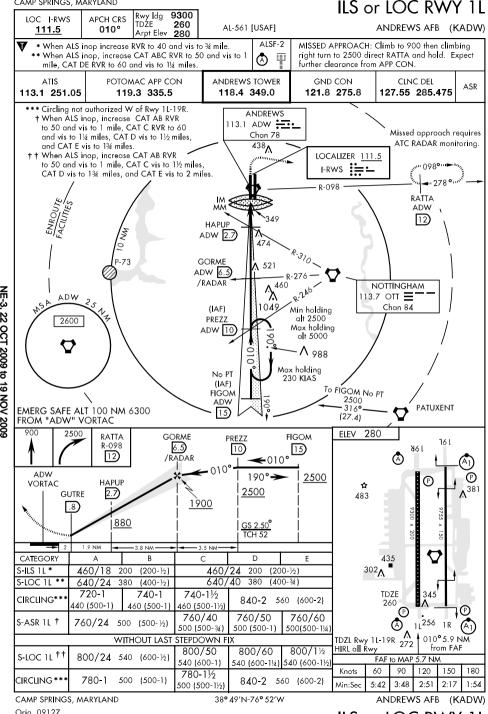
CAMP SPRINGS ONE DEPARTURE SL-561 [USAF] CAMP SPRINGS, MARYLAND Rwy Knots 120 180 240 ATIS 113.1 251.05 1140 11/1R V/V(fpm) 380 760 1520 GND CON ATC Climb Rate to 3000 121.8 275.8 ANDREWS TOWER 118.4 349.0 POTOMAC TRACON DEP CON If unable to make published climb gradient 118.95 257.2 advise ATC prior to departure. RADAR REQUIRED 1149 Λ RADAR VECTORS REQUIRED WITHIN 10 NM FROM DEPARTURE ADW 3000 270° ANDREWS ADW 113.1 ADW ==• 8 Chan 78 V DEPARTURE ROUTE DESCRIPTION

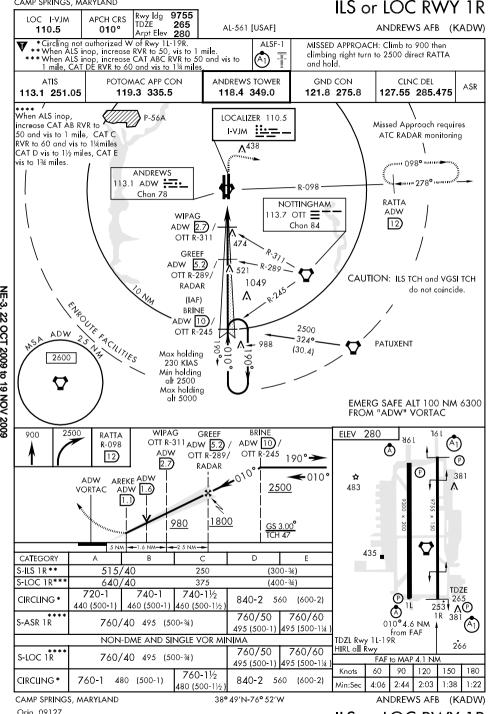
TAKE-OFF RWY 1L/1R: Turn left climb on track 270° within 3 DME of ADW VORTAC, cross ADW 8 DME at 3000. Expect radar vectors.

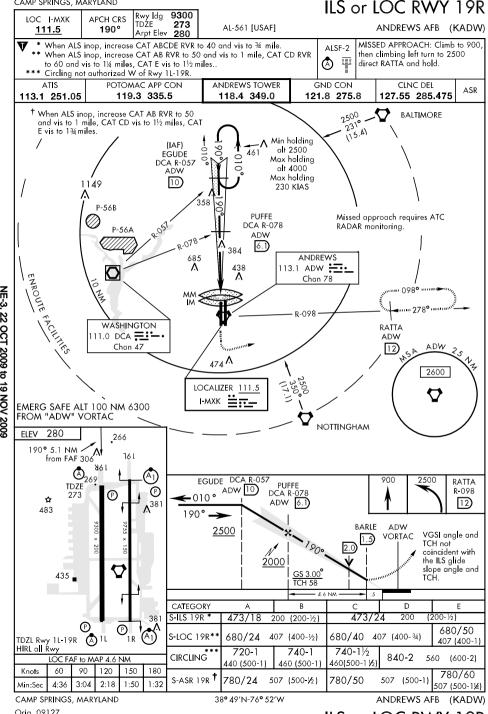
TAKE-OFF RWY 19R/19L: Climb on track 190° to 3000. Expect radar vectors to the west.

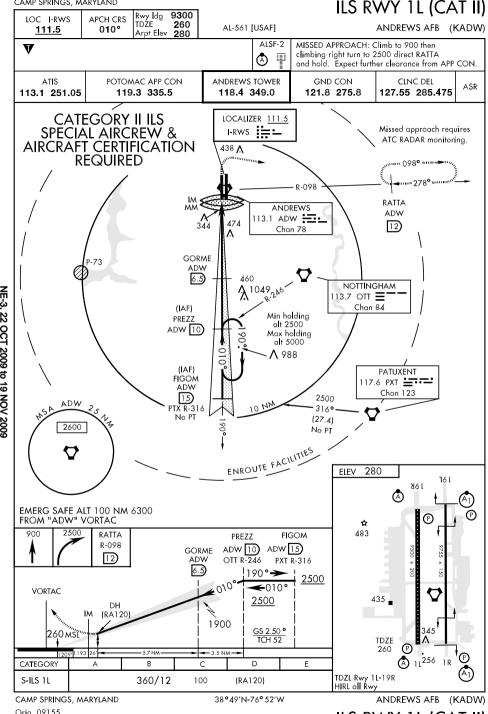


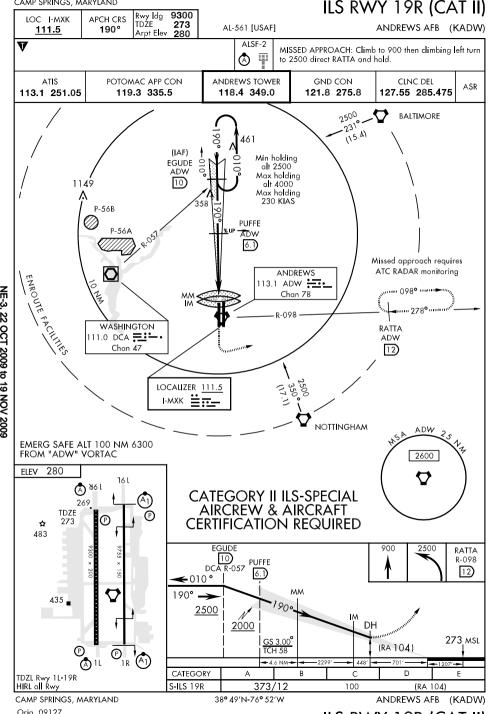




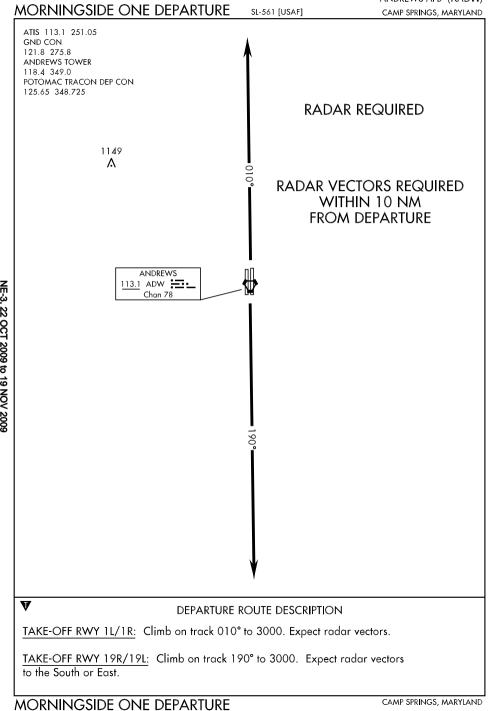


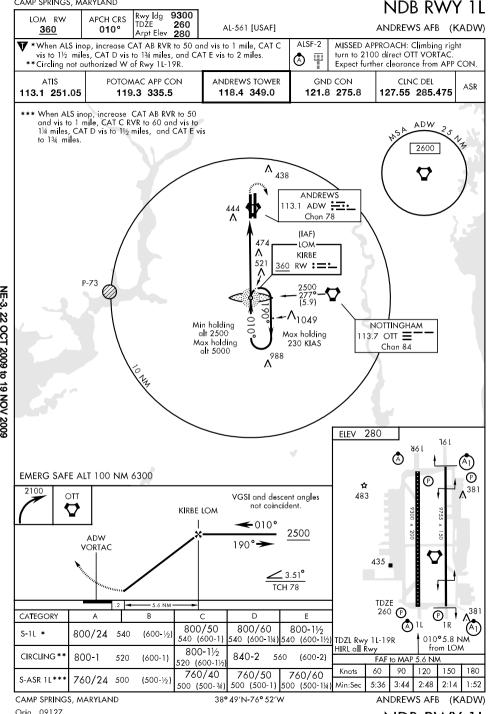


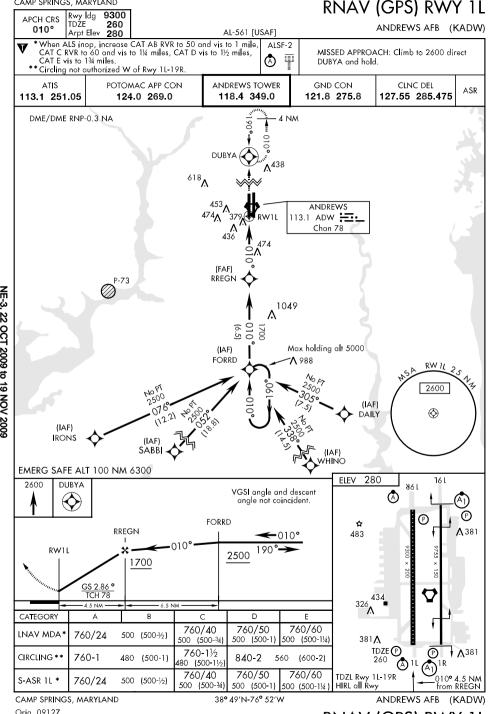


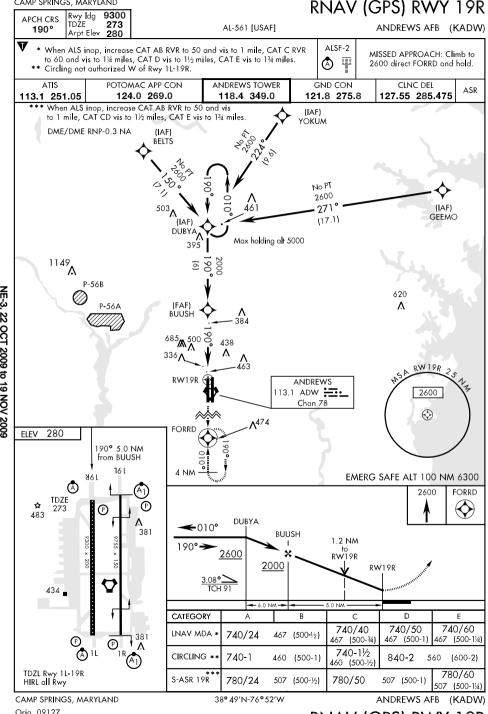


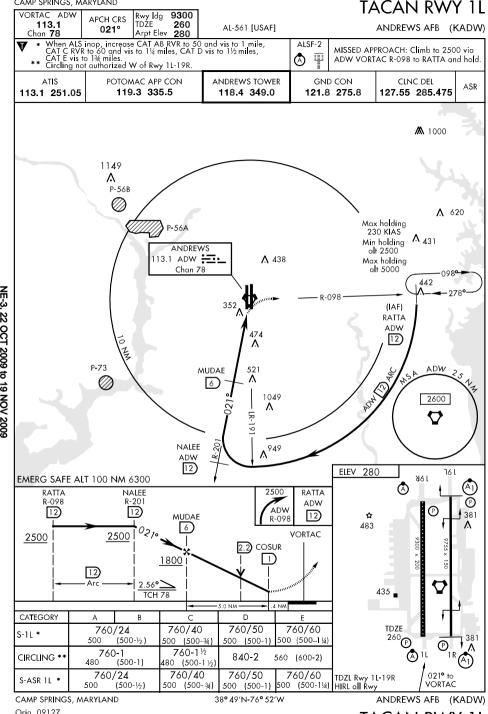
(IRONS.IRONS4) SI 443 (FAA) **IRONS FOUR ARRIVAL** WASHINGTON, DC 74-~ mmin (v POTOMAC APP CON WASHINGTON COLLEGE PARK 111.0 DCA =: --119.85 322.3 (DCA ARRIVALS ONLY) Linne// **FREEWAY** 128.35 270.275 (ADW ARRIVALS ONLY) Chan 47 ANDREWS AFB ATIS RONALD REAGAN 113.1 251.05 ANDREWS AFR WASHINGTON NATIONAL WASHINGTON NATIONAL ATIS R-10 \subseteq 132.65 R-289 SAMMO WASHINGTON EXECUTIVE/ N38°44.66′ W77°03.66′ HYDE FIELD POTOMAC AIRFIELD 8 NOTTINGHAM R-7.48 113.7 OTT NOTE: Aircraft use DCA ATIS to Chan 84 determine the direction **IRONS** of landing prior to IRONS N38°31.87' INT. (DCĂ only). OJAAY W77°06.37′ N38°17.56' W77°09.38′ TURBOJET VERTICAL NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE **NAVIGATION PLANNING** TO 18,000 MSL. INFORMATION (DCA only) Expect to cross at 10,000 feet 48 (and expect 250 kts in a North operation). JIMBE N38°07.68′ W77°11.44′ (%) (21) **EPICS** N37°47.15' **HARCUM** W77°15.82' 108.8 HCM ::--FLAT ROCK Chan 25 113.3 FAK ::-: Chan 80 P.3/5 RICHMOND 114.1 RIC ::.: Chan 88 N37°30.14′ - W77°19.22′ L-34-36, H-10-12 NOTE: Chart not to scale. RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence.From over IRONS INT: Ronald Reagan Washington National Airport (DCA only): LANDING SOUTH: Then via DCA R-198 to SAMMÓ INT, heading for vectors to the final approach course. LANDING NORTH: Expect vectors to final approach course. All other airports: Expect vectors.

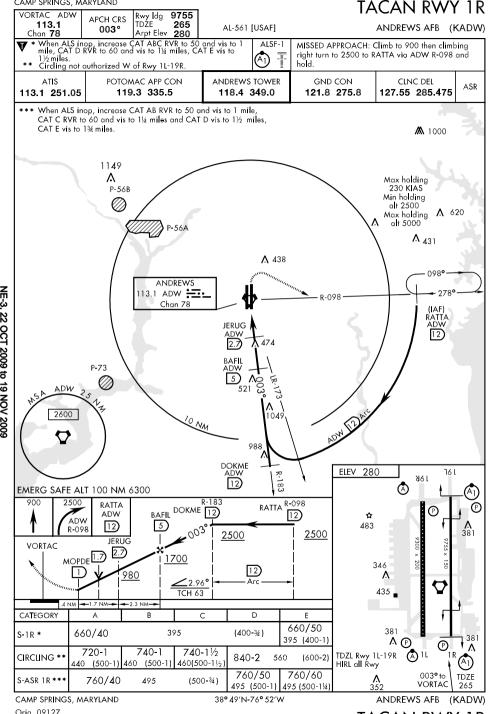


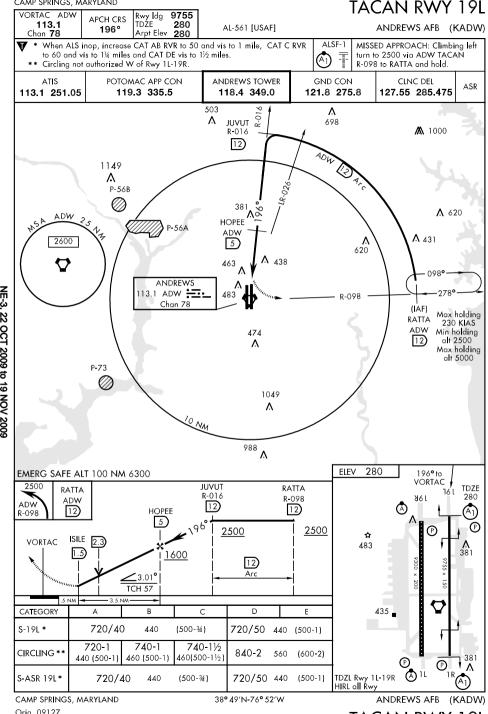


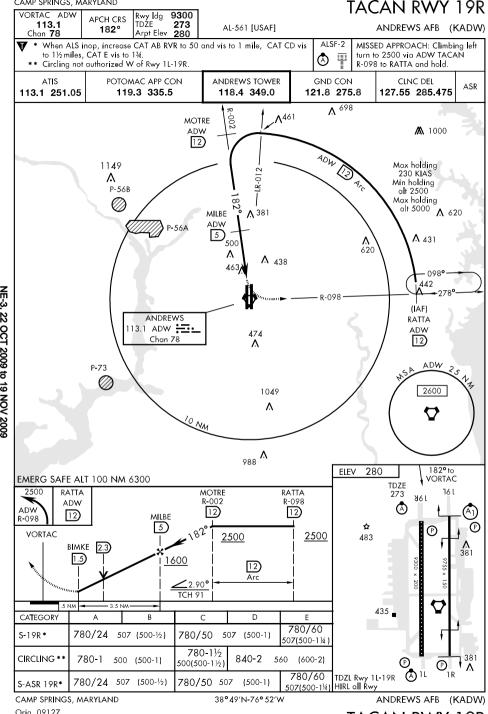


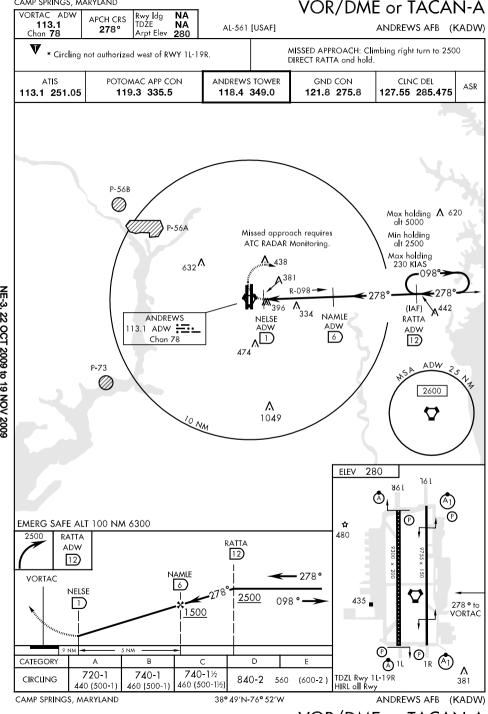


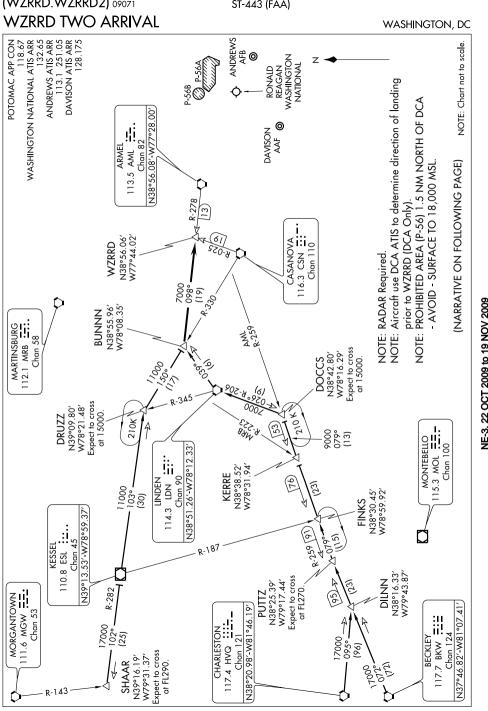








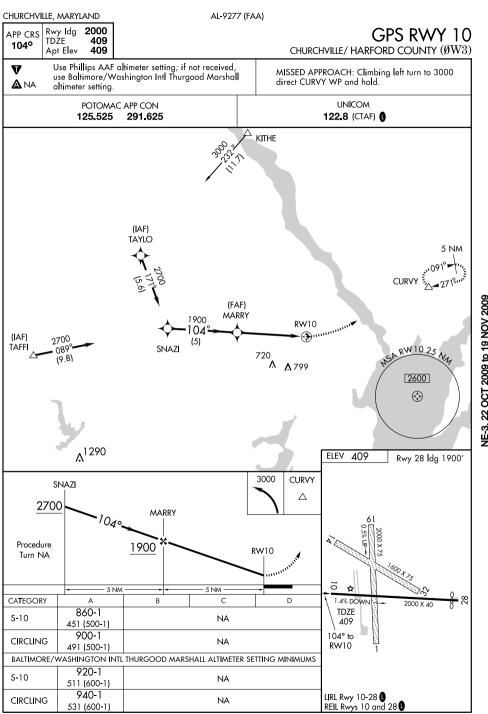


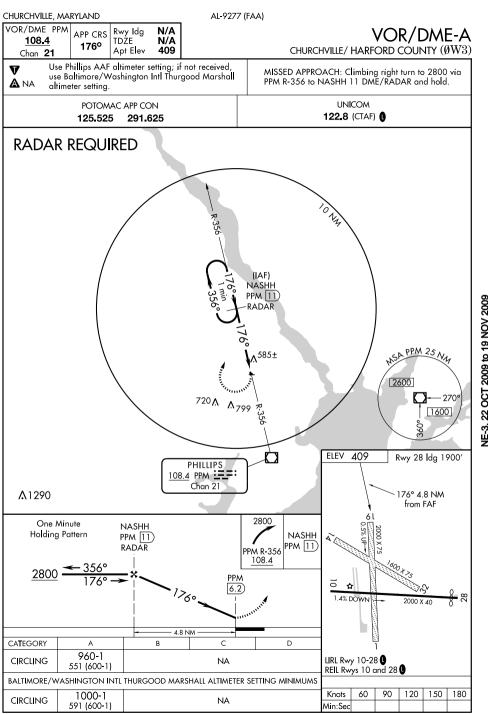


(WZRKD.WZRKDZ) 08045 ST-443 (FAA) WZRRD TWO ARRIVAL WASHINGTON, DC ARRIVAL ROUTE DESCRIPTION BECKLEY TRANSITION (BKW.WZRRD2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence CHARLESTON TRANSITION (HVQ.WZRRD2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence SHAAR TRANSITION (SHAAR.WZRRD2): From over SHAAR INT via ESL R-282 to

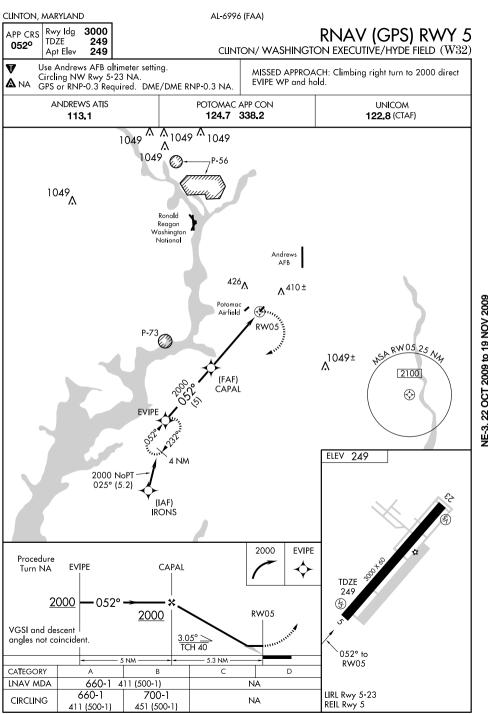
ESL VOR/DME, then via R-103 to DRUZZ INT, then via CSN R-330 to BUNNN. thence

. . . . from over BUNNN INT via AML R-278 to WZRRD INT. Expect vectors to final approach course after WZRRD INT.



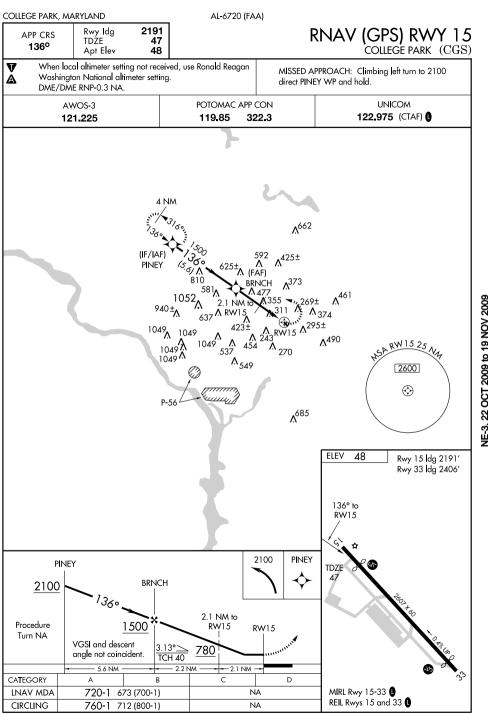


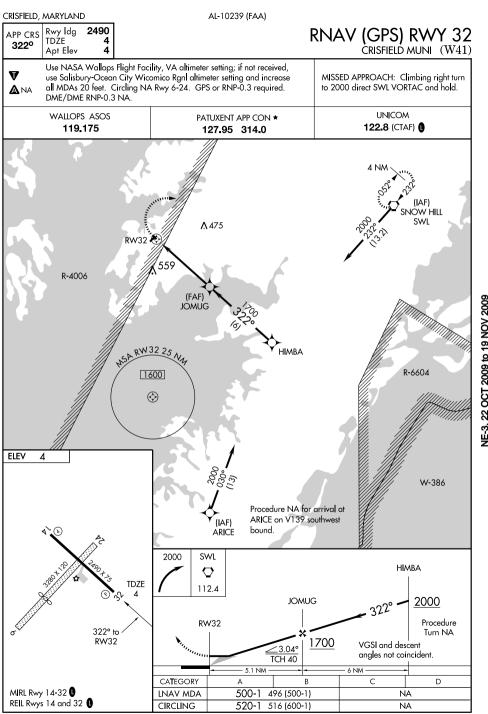
(IRONS.IRONS4) SI 443 (FAA) **IRONS FOUR ARRIVAL** WASHINGTON, DC 74-~ mmin (v POTOMAC APP CON WASHINGTON COLLEGE PARK 111.0 DCA =: --119.85 322.3 (DCA ARRIVALS ONLY) Linne// **FREEWAY** 128.35 270.275 (ADW ARRIVALS ONLY) Chan 47 ANDREWS AFB ATIS RONALD REAGAN 113.1 251.05 ANDREWS AFR WASHINGTON NATIONAL WASHINGTON NATIONAL ATIS R-10 \subseteq 132.65 R-289 SAMMO WASHINGTON EXECUTIVE/ N38°44.66′ W77°03.66′ HYDE FIELD POTOMAC AIRFIELD 8 NOTTINGHAM R-7.48 113.7 OTT NOTE: Aircraft use DCA ATIS to Chan 84 determine the direction **IRONS** of landing prior to IRONS N38°31.87' INT. (DCĂ only). OJAAY W77°06.37′ N38°17.56' W77°09.38′ TURBOJET VERTICAL NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE **NAVIGATION PLANNING** TO 18,000 MSL. INFORMATION (DCA only) Expect to cross at 10,000 feet 48 (and expect 250 kts in a North operation). JIMBE N38°07.68′ W77°11.44′ (%) (21) **EPICS** N37°47.15' **HARCUM** W77°15.82' 108.8 HCM ::--FLAT ROCK Chan 25 113.3 FAK ::-: Chan 80 P.3/5 RICHMOND 114.1 RIC ::.: Chan 88 N37°30.14′ - W77°19.22′ L-34-36, H-10-12 NOTE: Chart not to scale. RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence.From over IRONS INT: Ronald Reagan Washington National Airport (DCA only): LANDING SOUTH: Then via DCA R-198 to SAMMÓ INT, heading for vectors to the final approach course. LANDING NORTH: Expect vectors to final approach course. All other airports: Expect vectors.

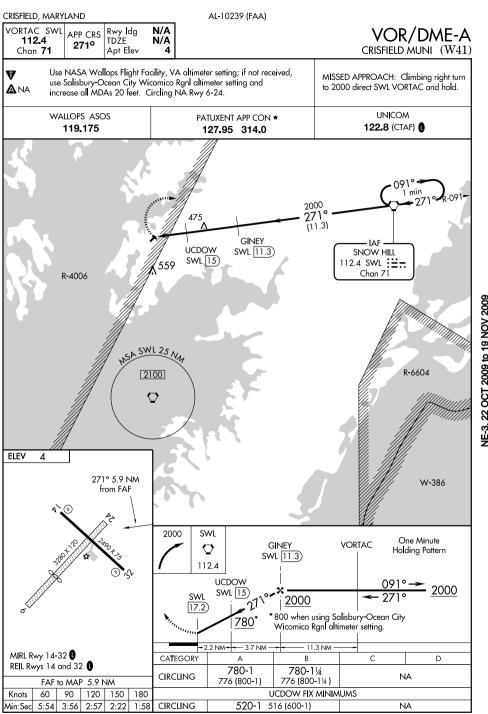


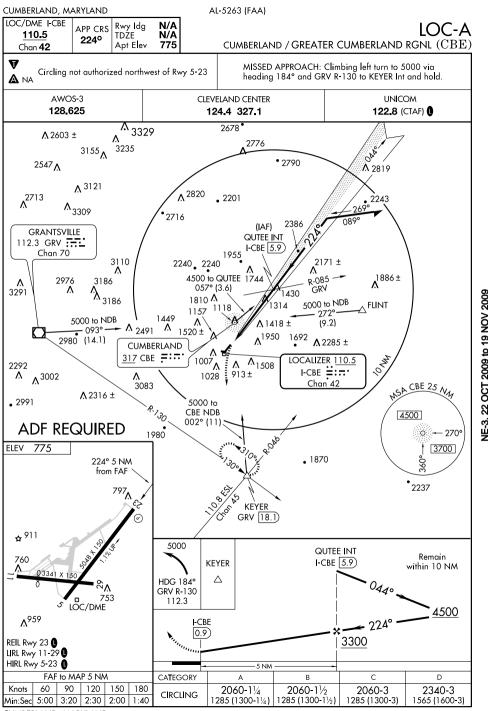
CLINTON, MARYLAND AL-6996 (FAA) VORTAC ADW 3000 VOR/DME RWY 5 Rwy Idg APP CRS 113.1 TDŹE 249 0510 CLINTON/ WASHINGTON EXECUTIVE/HYDE FIELD (W32) Apt Elev 249 Chan **78** 77 Use Andrews AFB altimeter setting. MISSED APPROACH: Climbing right turn to 2000 via ADW R-231 to FETAS/ADW 10.3 DME and hold. Circling NW Rwy 5-23 NA. A NA ANDREWS ATIS POTOMAC APP CON UNICOM 124.7 338.2 113,1 122,8 (CTAF) Λ1049 Λ¹⁰⁴⁹ **ANDREWS** <u>113.1</u> ADW <u>:</u>-∙ Chan 78 Ronald Reagan Washington National Andrews AFB ⁴²⁶∧ 410± Potomac 🌶 NE-3 22 OCT 2009 to 19 NOV 2009 Airfield P-73 2000 273° ∧(12.6) **GIYDE** (IAF) ADW 5 ASA ADW 25 NA **FETAS** 1049± ADW 10.3 2500 NOTTINGHAM 113.7 OTT Chan 84 ELEV 249 2000 **FETAS** One Minute **FETAS** ADW 10.3) Holding Pattern **TDZE** ADW [10.3] ADW R-231 249 113.1 GIYDE 0510 ADW 5 3.05° = VGSI and descent 051° 5.3 NM TCH 40 angles not coincident. from FAF LIRL Rwy 5-23 5.3 NM REIL Rwy 5 CATEGORY D В S-5 660-1 411 (500-1) NA 180 700-1 Knots 60 120 150 660-1 CIRCLING NA 411 (500-1) 451 (500-1) Min:Sec

(IRONS.IRONS4) SI 443 (FAA) **IRONS FOUR ARRIVAL** WASHINGTON, DC 74-~ mmin (v POTOMAC APP CON WASHINGTON COLLEGE PARK 111.0 DCA =: --119.85 322.3 (DCA ARRIVALS ONLY) Linne// **FREEWAY** 128.35 270.275 (ADW ARRIVALS ONLY) Chan 47 ANDREWS AFB ATIS RONALD REAGAN 113.1 251.05 ANDREWS AFR WASHINGTON NATIONAL WASHINGTON NATIONAL ATIS R-10 \subseteq 132.65 R-289 SAMMO WASHINGTON EXECUTIVE/ N38°44.66′ W77°03.66′ HYDE FIELD POTOMAC AIRFIELD 8 NOTTINGHAM R-7.48 113.7 OTT NOTE: Aircraft use DCA ATIS to Chan 84 determine the direction **IRONS** of landing prior to IRONS N38°31.87' INT. (DCĂ only). OJAAY W77°06.37′ N38°17.56' W77°09.38′ TURBOJET VERTICAL NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE **NAVIGATION PLANNING** TO 18,000 MSL. INFORMATION (DCA only) Expect to cross at 10,000 feet 48 (and expect 250 kts in a North operation). JIMBE N38°07.68′ W77°11.44′ (%) (21) **EPICS** N37°47.15' **HARCUM** W77°15.82' 108.8 HCM ::--FLAT ROCK Chan 25 113.3 FAK ::-: Chan 80 P.3/5 RICHMOND 114.1 RIC ::.: Chan 88 N37°30.14′ - W77°19.22′ L-34-36, H-10-12 NOTE: Chart not to scale. RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence.From over IRONS INT: Ronald Reagan Washington National Airport (DCA only): LANDING SOUTH: Then via DCA R-198 to SAMMÓ INT, heading for vectors to the final approach course. LANDING NORTH: Expect vectors to final approach course. All other airports: Expect vectors.



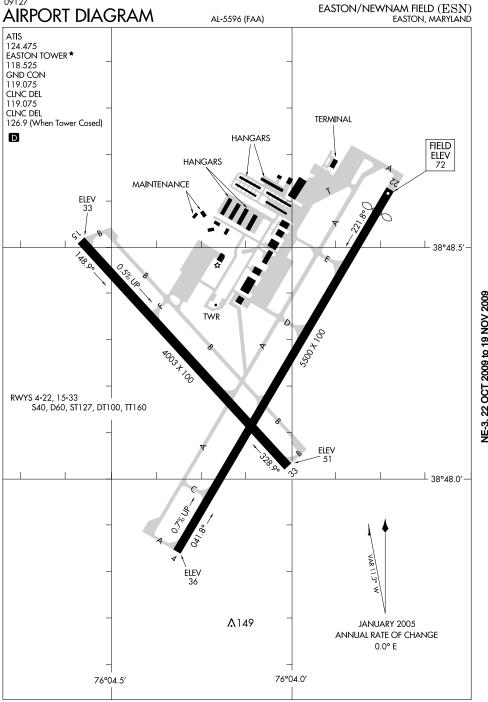


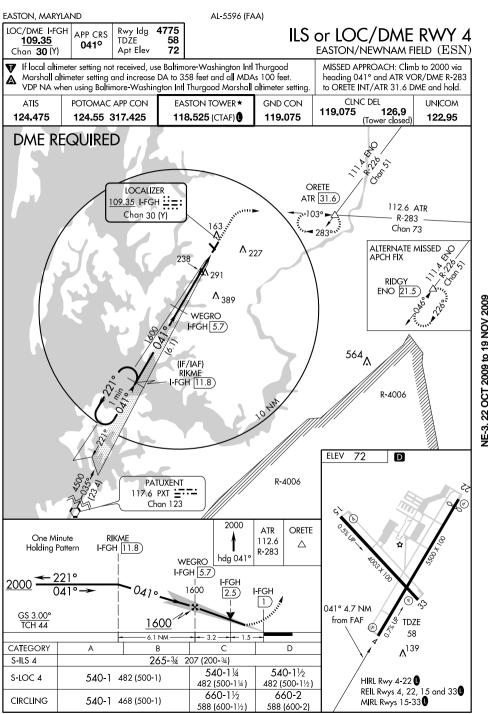




CUMBERLAND, MARYLAND AL-5263 (FAA) LOC/DME I-CBE 5048 Rwy Idg LOC/DME RWY 23 APP CRS 110.5 TDŹE 775 2240 CUMBERLAND / GREATER CUMBERLAND RGNL (CBE) Apt Elev 775 Chan 42 MISSED APPROACH: Climbing left turn to 5000 via Circling not authorized northwest of Rwy 5-23 heading 184° and GRV R-130 to KEYER Int and hold. AWOS-3 CLEVELAND CENTER UNICOM 128.625 124.4 327.1 122.8 (CTAF) 0 Λ_{2603 ±} Λ₃₂₃₅ Λ₂₉₇₉ Λ₃₁₅₅ . 2790 VOY ₂₅₄₇ ∧ 2819 ^3121 Λ²⁸²⁰ -269° 2713_A _ 2201 **∆** 3309 2243 2716 (IAF) 2386 HOLOE INT I-CBE 6.6 I-CBF GRANTSVILLE 10) 112.3 GRV :---3110 2240 2240 2171+ Chan 70 GRV R-084 1886 ± 4500 to HOLOE 3186 1810**A** CUMBERLAND 055° (4.3) 2976 Λ **1430** 3291 317 CBE **Ξ:**-1314 5000 to NDB 3186 NE-3 22 OCT 2009 to 19 NOV 2009 1520 ± Λ . 272°—△ 1035± . 3031 5000 to NDB (9.2)-CBE - 093° -3.1 1449 1157 ^ 2491 2980 (14.1) ۸₁₉₅₀ ^ 2285 ± 1007 **∧** ⊀ 1692 ^¹⁵⁰⁸ 2292 913± 1028 **∧** 3083 LOCALIZER 110.5 ۸ Λ₃₀₀₂ MSA CBE 25 Ny I-CBE **∷:**...• ^ 2316 ± Chan 42 . 2991 5000 to 4500 CBE NDB 002° (11) 1980 -270° **ADF REQUIRED** 3700 1870 **ELEV** 775 224° 5.7 NM from FAF • 2237 797**^ KEYER** GRV [18.1] **TDZE** 775 5000 HOLOE INT Remain I-CBE 6.6) **☆** 911 **KEYER** within 10 NM Δ HDG 184° 760 GRV R-130 I-CBE 112.3 Q3341 X I-CBE 10) 4300 3.1 I-CBE 753 2.5) I-CBE 3500 LOC/DME 0.9 3000 Λ⁹⁵⁹ 3.59° VGSI and descent TCH 35 1640 angles not coincident. -1.6 NM ---- 0.6 NM 3.5 NM -3.4 NM-CATEGORY D 1400-13/4 1400-2 S-23 1400-1 625 (700-1) 625 (700-13/4) 625 (700-2) REIL Rwy 23 🕕 LIRL Rwy 11-29 0 2060-3 2340-3 2060-11/4 2060-11/2 CIRCLING HIRL Rwy 5-23 1 1285 (1300-3) 1285 (1300-11/4) | 1285 (1300-11/2) 1565 (1600-3)

CUMBERLAND, MARYLAND AL-5263 (FAA) Rwy Ida 5048 RNAV (GPS) RWY 5 APP CRS TDŹE 747 0310 CUMBERLAND / GREATER CUMBERLAND RGNL (CBE)Apt Elev 775 V Circling not authorized NW of Rwy 5-23. MISSED APPROACH: Climb to GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA. 4500 direct HOLOE WP and hold. **A** NA AWOS-3 CLEVELAND CENTER UNICOM 128.625 124.4 327.1 122,8 (CTAF) (2386 1955 **v**3110 ۸¹⁷⁴⁴ 2240 • 2240 3291 2976_A 3186 HOLOE Λ 1886 ± λ_{3186} 1810_A 1314 🔨 1430 GRANTSVILLE 1118 1520 ± GRV 3031° 2491 ۸ Λ 2980 1950 1449 1157 1 1692 Λ_{2285 ±} 1007 A RW05 1508 ∴ **∧ ′∴** 913± 1927 ± A 2292 A V 3083 Λ^{2316 ±} 1₀₂₈ 3002 2991 NE-3 22 OCT 2009 to 19 NOV 2009 (FAF) 1980° ĖSERY (IAF) ERBIW . 1870 300 NOPT 2305 2237 15) 4300 NOPT (IAF) HADXE 2327 ^\ 5000 (IF/IAF) ECUXE 116.71 CAPON 3275 (IAF) NSA RW 05 25 Ny OMEPY **ELEV** 775 4500 ⁷⁹⁷∧ ⟨[€]ट> \^3470± \bigcirc KESSEL **☆** 911 **ESL ECUXE** 4500 HOLOE 760 **ESERY** 4300 0310 753 **TDZE** 747 ۸⁹⁵⁹ Procedure RW05 Turn NA 2800 3.19° TCH 45 031° to RW05 6 NM -5 NM CATEGORY C D Α REIL Rwy 23 1 LNAV MDA 2020-11/4 1273 (1300-11/4) 2020-3 1273 (1300-3) LIRL Rwy 11-29 1 2020-11/4 2020-11/2 2020-3 2200-3 CIRCLING HIRL Rwy 5-23 1 1245 (1300-11/4) | 1245 (1300-11/2) 1245 (1300-3) 1425 (1500-3)





NE-3 22 OCT 2009 to 19 NOV 2009

148°

4003 Rwy Ida APP CRS TDŹE 47 Apt Elev 72

RNAV (GPS) RWY 15 EASTON/NEWNAM FIELD (ESN)

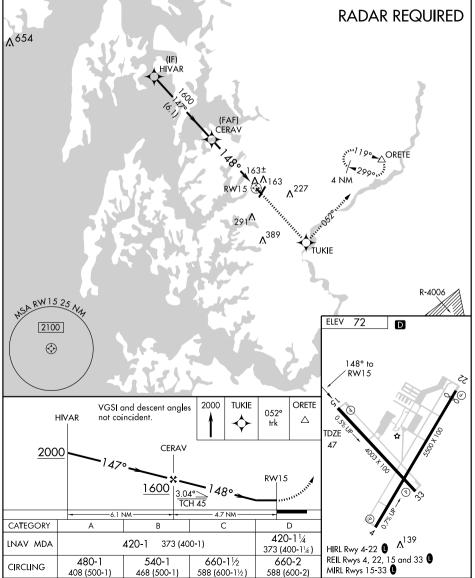
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase all MDAs 100 feet, LNAV Cats C and D

MISSED APPROACH: Climb to 2000 direct TUKIE and via 052° track to ORETE and hold.

NE-3 22 OCT 2009 to 19 NOV 2009

A visibility ¼ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile.

CINC DEL POTOMAC APP CON EASTON TOWER★ UNICOM ATIS **GND CON** 119.075 126.9 119.075 124.475 124.55 317.425 118,525 (CTAF) 0 122.95 (Tower closed)



ELEV 72 D R-4006 221° to ⁵⁶⁴∧ RW22 RIKME Procedure 2200 VGSI and RNAV glidepath FILRO not coincident. Turn NA 2000 TDZE ZULIV 72 ¥ RW22 GS 3.00° 1600 TCH 40 4.6 NM 6.1 NM-CATEGORY Α В D LPV DA 352-1 280 (300-1) LNAV/ DA 434-11/4 362 (400-11/4) VNAV ∧¹³⁹ 440-11/4 440-1 368 (400-1) LNAV MDA HIRL Rwy 4-22 0 368 (400-11/4) REIL Rwys 4, 22, 15 and 33 0 480-1 660-11/2 540 - 1660-2 CIRCLING MIRL Rwy15-33 0 408 (500-1) 468 (500-1) 588 (600-11/2) 588 (600-2)

NE-3 22 OCT 2009 to 19 NOV 2009

APP CRS TDZE 51
Apt Elev 72

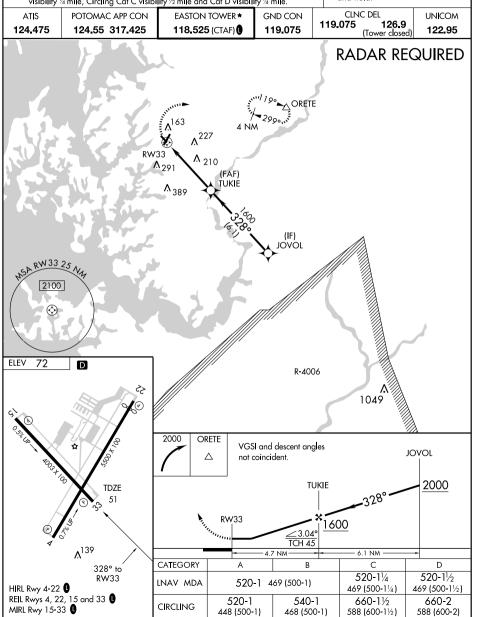
RNAV (GPS) RWY 33
EASTON/NEWNAM FIELD (ESN)

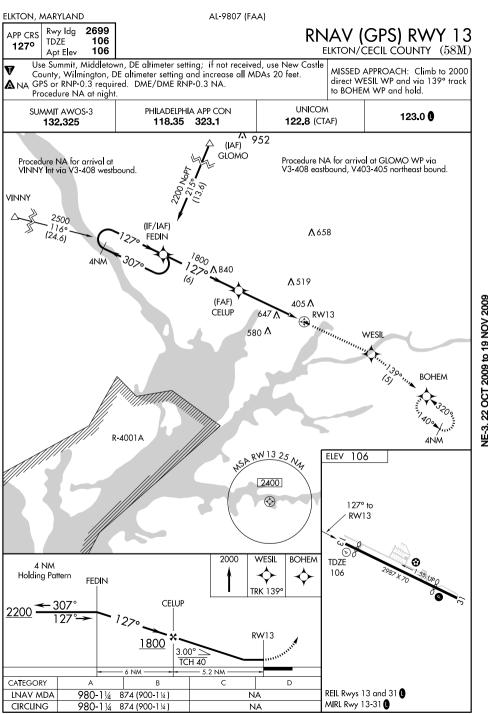
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

When local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase all MDA 100 feet, LNAV Cat C and D visibility ¼ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile.

good MISSED APPROACH: Climbing right turn to 2000 direct ORETE and hold.

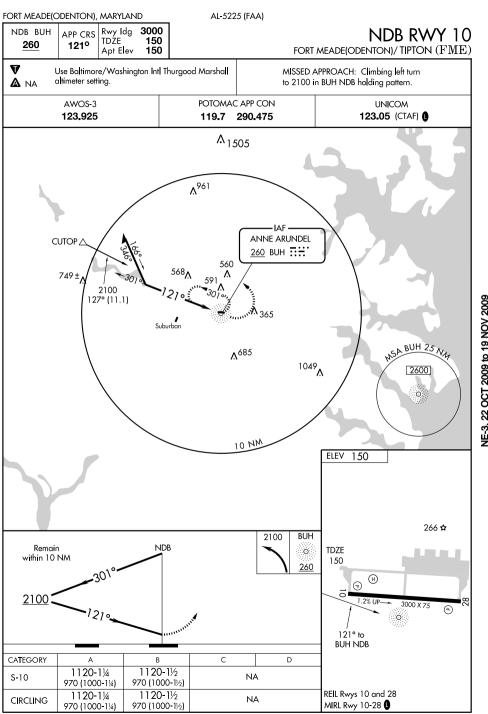
NE-3 22 OCT 2009 to 19 NOV 2009

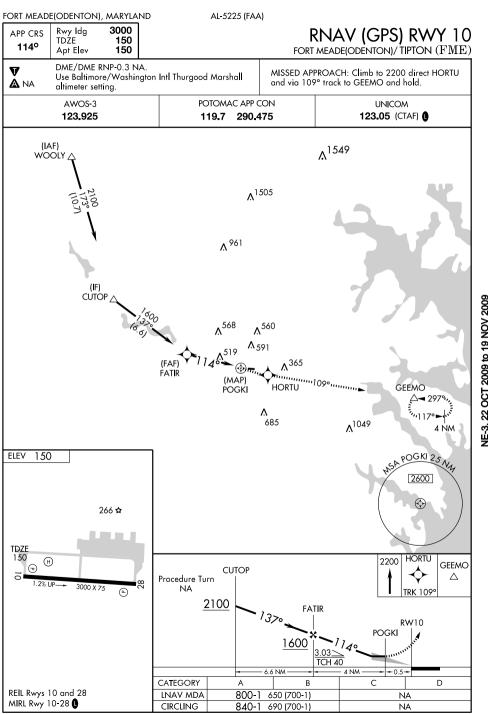


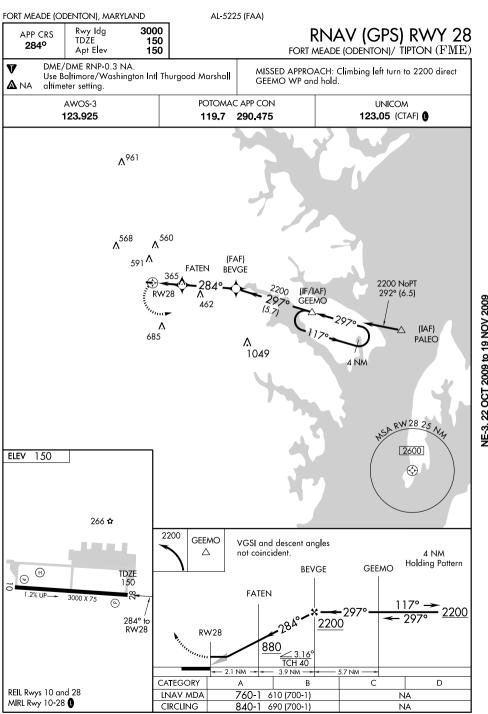


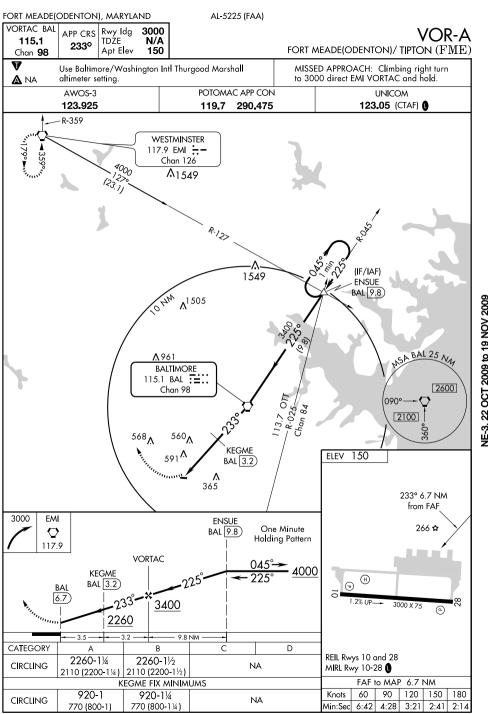
ELKTON, MARYLAND AL-9807 (FAA) 2385 Rwy Idg RNAV (GPS) RWY 31 APP CRS TDŹE 106 3080 ELKTON/ CECIL COUNTY (58M) Apt Elev 106 GPS or RNP -0.3 required. DME/DME RNP -0.3 NA. V Use Summit, Middletown, DE altimeter setting; if not received, use MISSED APPROACH: Climbing left turn New Castle, Wilmington, DE altimeter setting and raise all MDAs 20 feet. to 2000 direct BOHEM WP and hold. A NA Circling NA at night. SUMMIT AWOS-3 UNICOM PHILADELPHIA APP CON 123.0 0 132.325 323.1 122.8 (CTAF) 118.35 1049 1 ۸⁶⁵⁸ WOODSTOWN \^⁸⁴⁰ OOD **1**519 2000 255% 405 **∧** 647 RW31 580 Λ (FAF) NE-3 22 OCT 2009 to 19 NOV 2009 (IF/IAF) **BOHEM** 2000 NoPT 332° (4.5) (IAF) CANUV SA RW31 25 Ny ELEV 106 2400 \Diamond 2000 **BOHEM** 4 NM **TDZE** BOHEM Holding Pattern 106 WESIL 308° to RW31 RW31 308° 1700 VGSI and descent 3.01° TCH 40 angles not coincident. 5 NM 5 NM CATEGORY Α C D REIL Rwys 13 and 31 LNAV MDA 600-1 494 (500-1) NA MIRL Rwy 13-31 0 CIRCLING 714 (800-1) 820-1 NA

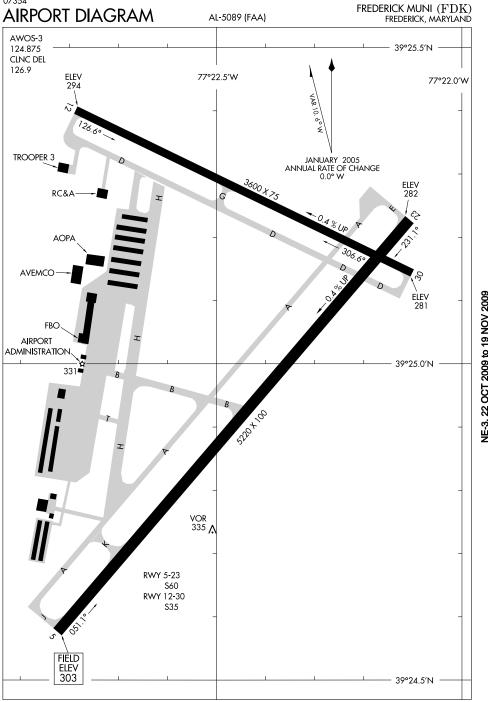
ELKTON, MARYLAND AL-9807 (FAA) VORTAC ENO Rwy Idg 2385 VOR/DME RWY 31 APP CRS TDŹE 106 111.4 331° ELKTON/ CECIL COUNTY (58M) Apt Elev 106 Chan **51** MISSED APPROACH: Climbing left turn V Use Summit, Middletown, DE altimeter setting; if not received, use New Castle, Wilmington, DE altimeter setting and raise all MDAs 20 feet. to 2000 via ENO R-331 to RANRE/ENO **A** NA Circling NA at night. VORTAC 16 DME and hold. UNICOM PHILADELPHIA APP CON SUMMIT AWOS-3 123.0 0 118.35 323.1 122.8 (CTAF) 132.325 1049 \Lambda ۸ ⁶⁵⁸ WOODSTOWN 112.8 OOD === \^⁸⁴⁰ Chan 75 Λ519 405/1 ENO 26.2) MRINA 580 Λ Summit SWIMN NE-3 22 OCT 2009 to 19 NOV 2009 ENO 21) (IAF) RANRE ENO [16) 2000 NoPT 331° (3.8) (IAF) MSA ENO 27 M **UKİEY İNT** ENO 12.2) **ELEV** 106 2100 **SMYRNA** 111.4 ENO =-Chan 51 2000 RANRE TDZE **RANRE** ENO [16) One Minute 106 ENO [16] **SWIMN** Holding Pattern ENO R-331 ENO 21) 111.4 MRINA 331° ENO 26.2) 331° 5.2 NM 1800 VGSI and descent <u> 3.09</u>° from FAF TCH 40 angles not coincident. 5.2 NM -5 NM CATEGORY C D Α В 720-1 720-11/4 S-31 NA 614 (700-1) 614 (700-11/4) REIL Rwys 13 and 31 820-1 820-11/4 CIRCLING NA MIRL Rwy 13-31 0 714 (800-1) 714 (800-11/4)

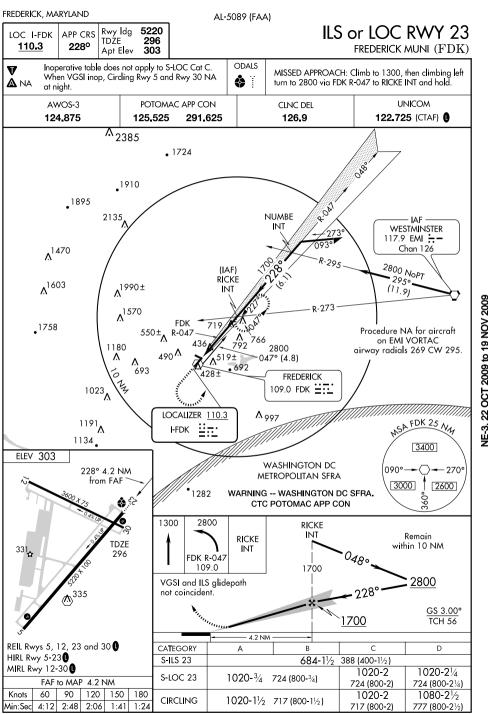


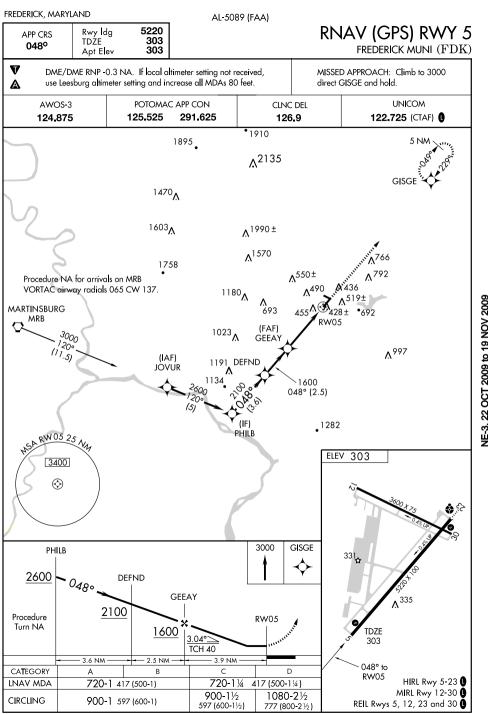


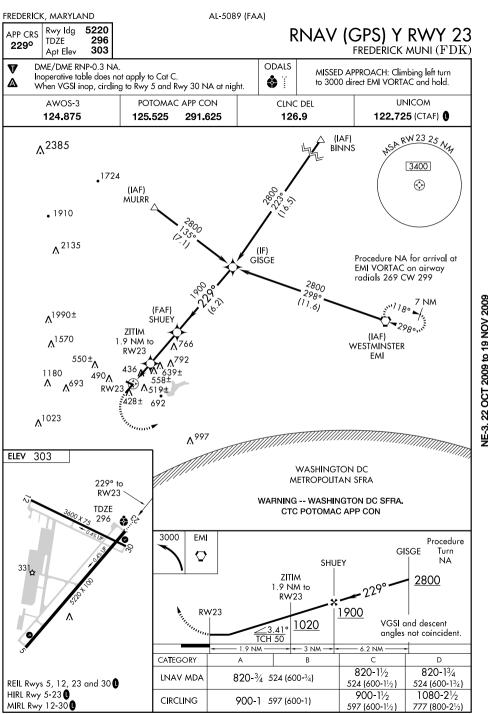


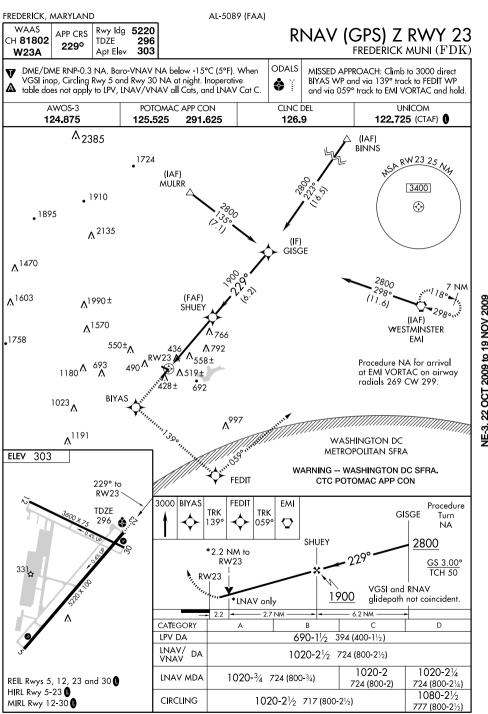


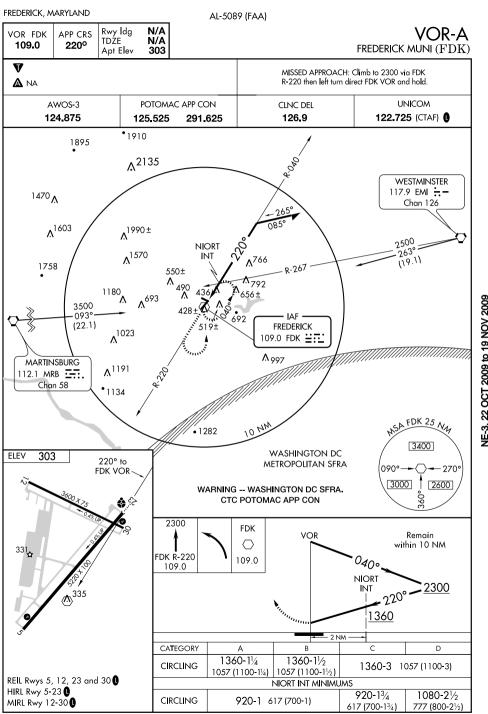






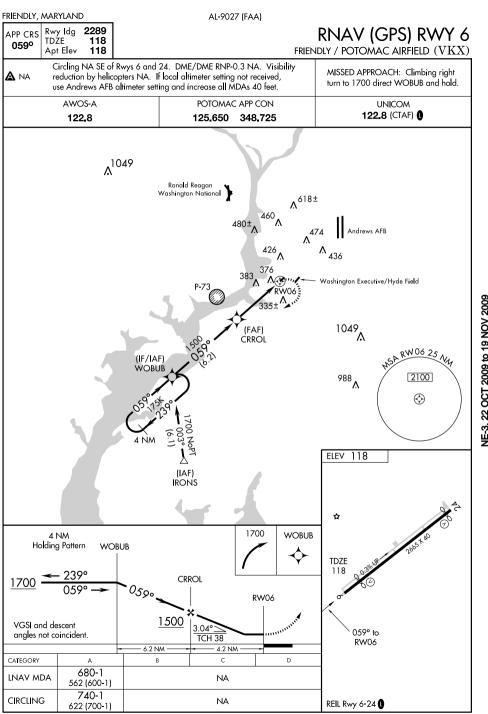


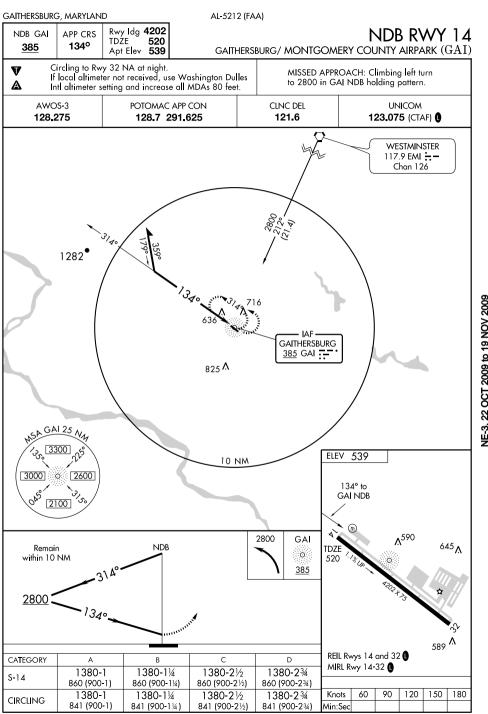


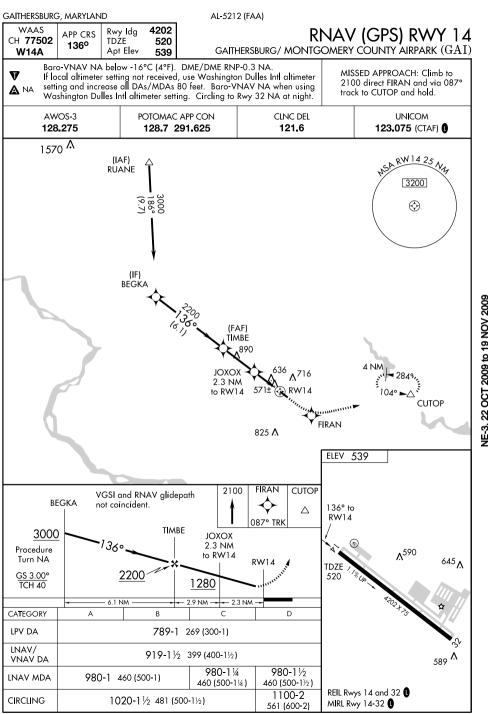


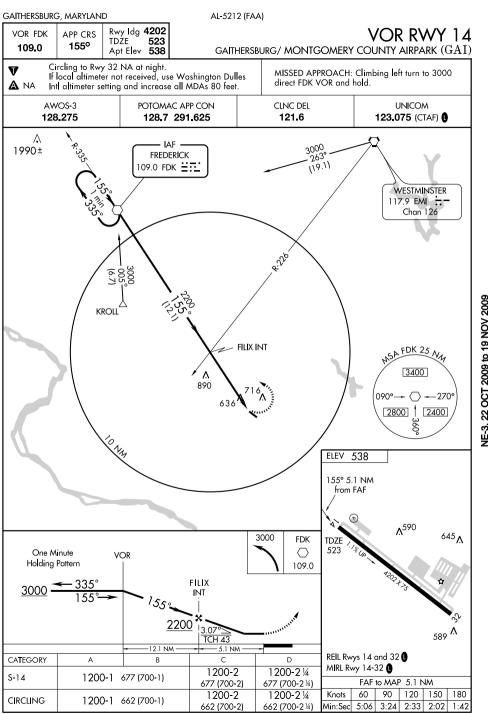
(IRONS.IRONS4) SI 443 (FAA) **IRONS FOUR ARRIVAL** WASHINGTON, DC 74-~ mmin (v POTOMAC APP CON WASHINGTON COLLEGE PARK 111.0 DCA =: --119.85 322.3 (DCA ARRIVALS ONLY) Linne// **FREEWAY** 128.35 270.275 (ADW ARRIVALS ONLY) Chan 47 ANDREWS AFB ATIS RONALD REAGAN 113.1 251.05 ANDREWS AFR WASHINGTON NATIONAL WASHINGTON NATIONAL ATIS R-10 \subseteq 132.65 R-289 SAMMO WASHINGTON EXECUTIVE/ N38°44.66′ W77°03.66′ HYDE FIELD POTOMAC AIRFIELD 8 NOTTINGHAM R-7.48 113.7 OTT NOTE: Aircraft use DCA ATIS to Chan 84 determine the direction **IRONS** of landing prior to IRONS N38°31.87' INT. (DCĂ only). OJAAY W77°06.37′ N38°17.56' W77°09.38′ TURBOJET VERTICAL NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE **NAVIGATION PLANNING** TO 18,000 MSL. INFORMATION (DCA only) Expect to cross at 10,000 feet 48 (and expect 250 kts in a North operation). JIMBE N38°07.68′ W77°11.44′ (%) (21) **EPICS** N37°47.15' **HARCUM** W77°15.82' 108.8 HCM ::--FLAT ROCK Chan 25 113.3 FAK ::-: Chan 80 P.3/5 RICHMOND 114.1 RIC ::.: Chan 88 N37°30.14′ - W77°19.22′ L-34-36, H-10-12 NOTE: Chart not to scale. RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence.From over IRONS INT: Ronald Reagan Washington National Airport (DCA only): LANDING SOUTH: Then via DCA R-198 to SAMMÓ INT, heading for vectors to the final approach course. LANDING NORTH: Expect vectors to final approach course. All other airports: Expect vectors.

VE-3 22 OCT 2009 to 19 NOV 2009

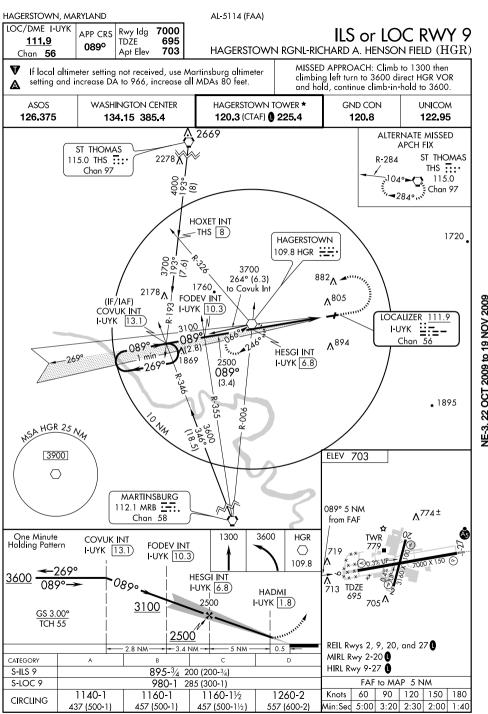




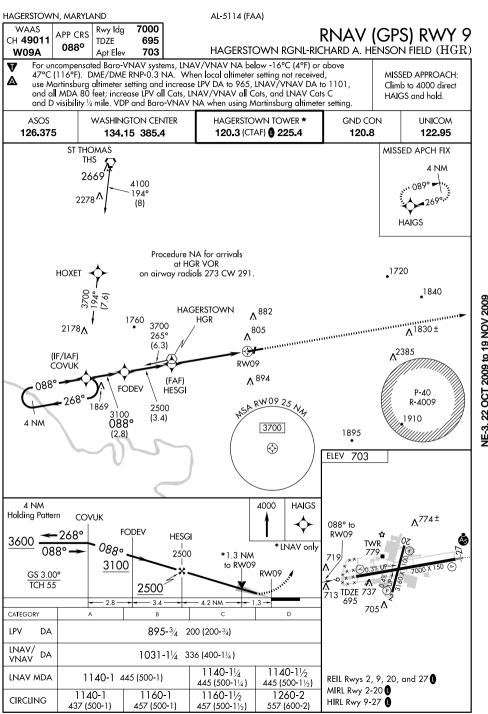


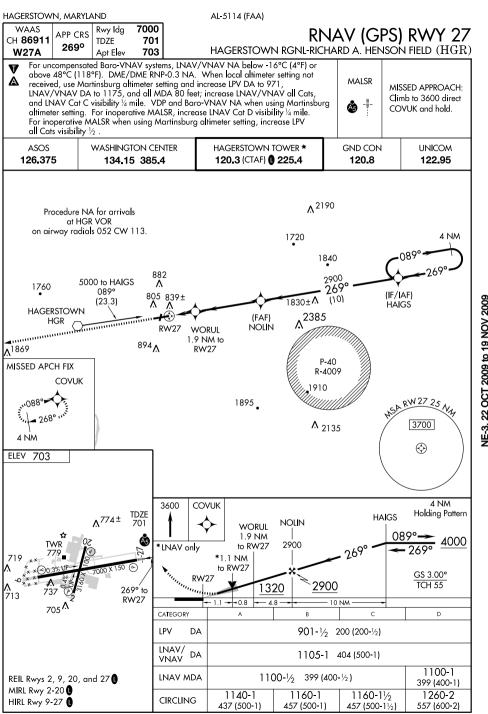


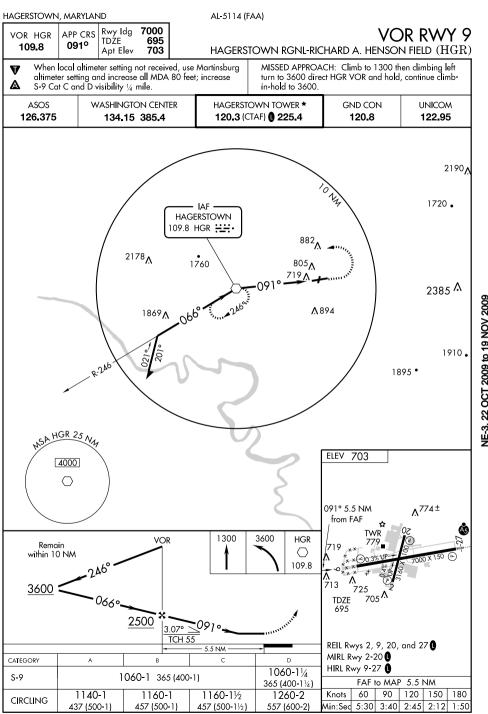
AIRPORT DIAGRAM HAGERSTOWN RGNL-RICHARD A HENSON FIELD (HGR) AL-5114 (FAA) HAGERSTOWN, MARYLAND AL-5114 (FAA) HAGERSTOWN TOWER * 120.3 225.4 GND CON 120.8 S80, D100, ST127, DT170 RWY 9-27 S100, D150, ST175, DT250 ELEV 686 12 CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED. .270.9° **RWY 2-20** HANGARS TOP FLIGHT AIRPARK 39°43.0'N 39°42.0'N NE-3, 22 OCT 2009 to 19 NOV 2009 FIELD ELEV 703 77°43.5′W ₹ 7000 X 150 ▲ -205.30 3180 X 100 025.30 ELEV 690 qU %⊅.0 CONTROL TOWER 779 **IERMINAL** HANGARS 0.3% UP-0.060 JANUARY 2005 ANNUAL RATE OF CHANGE 0.0° W 9 × ELEV 665 VAR 10.4° W 77°44.5′W

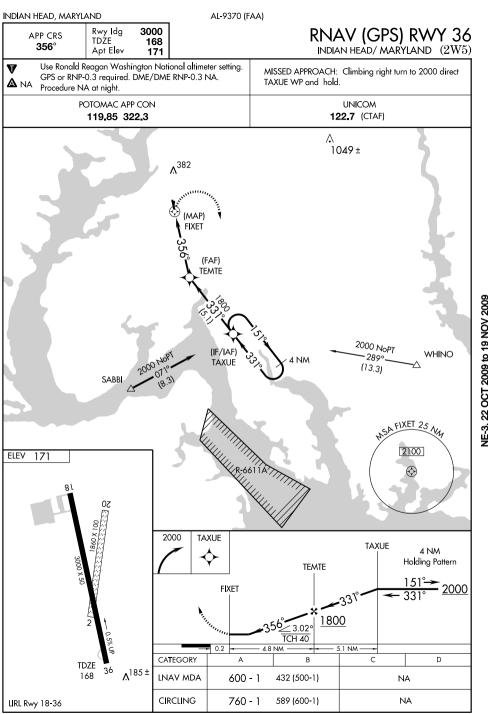


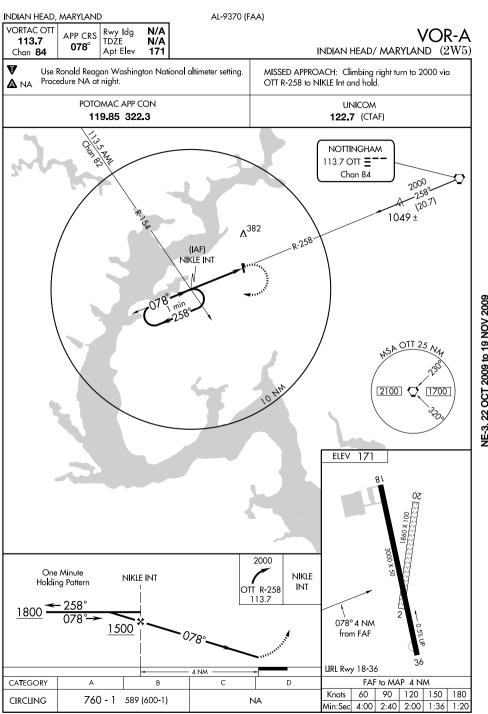
HAGERSTOWN, MARYLAND AL-5114 (FAA) LOC/DME I-HGR Rwy Idg **7000** ILS or LOC RWY 27 APP CRS 111.9 TDŹE 701 2690 HAGERSTOWN RGNL-RICHARD A. HENSON FIELD (HGR)Apt Elev 703 Chan 56 When local altimeter setting not received; use Martinsburg altimeter setting and MISSED APPROACH: MALSR increase DA to 971 and all MDA 80 feet; increase S-LOC 27 Cat D and JOMES Climb to 4000 direct Α Fix minimum S-LOC 27 Cat C visibility ¼ mile. VDP NA when using Martinsburg HGR VOR and hold. altimeter setting. For inoperative MALSR, increase JOMES Fix minimums S-LOC 27 continue climb-in-hold Cat D visibility 1/4 mile. For inoperative MALSR, when using Martinsburg to 4000 altimeter setting, increase S-ILS 27 all Cats visibility ½ mile. ASOS WASHINGTON CENTER HAGERSTOWN TOWER ★ GND CON UNICOM 120.3 (CTAF) 0 225.4 126.375 134.15 385.4 120.8 122 95 ²¹⁹⁰^ R-010-I-HGR 1720 0899 **HAGERSTOWN** 089° **NOLIN INT** 1840 109.8 HGR ::::• 1 min I-HGR (6.5) 269° 882**^** 2900 **IOMES** 269° 1760 ₉₀₅^ HĠR I-HGR [1.4] ⁸⁰⁵∧ _[10] R-088 5000 2385^{1830±} to HAIGS VE-3 22 OCT 2009 to 19 NOV 2009 (IF/IAF) 088° HAIGS INT R-246 (23.3)779± I-HGR 16.5 ⁸⁹⁴∧ LOCALIZER 111.9 P-40 MSA HGR 25 Ny R-4009 I-HGR <u>∺</u> :: ALTERNATE MISSED APCH FIX Chan 56 1910 4000 MARTINSBURG . 1895 MRB 2135 10 NM Chan 58 290° FR-110-60 ELEV 703 4000 *1200 when using Martinsburg **HGR** HAIGS INT altimeter setting. One Minute \bigcirc I-HGR 16.5) Holding Pattern **NOLIN INT** 109 8 I-HGR (6.5) **JOMES** I-HGR DME I-HGR 1.4 ۸^{774±} ANTENNA 2900 269° **TDZE** I-HGR (3) 701 0.8 **TWR** I-HGR 2900 0.2 GS 3.00° 1120 TCH 55 * LOC only 0.2 0.8 0.6 5.1 NM 10 NM **/** |713 269° 6.7 NM CATEGORY D from FAF 705 ^ S-ILS 27 901-1/2 200 (200-1/2) S-LOC 27 1120-1/2 419 (500-1/2) 1120-3/4 419 (500-34) 1140-1 1160-1 1160 - 11/2 1260-2 CIRCLING REIL Rwys 2, 9, 20, and 27 437 (500-1) 457 (500-1) 457 (500-11/2) 557 (600-2) MIRL Rwy 2-20 (JOMES FIX MINIMUMS HIRL Rwy 9-27 1040-3/4 S-LOC 27 1040-1/2 339 (400-1/2) FAF to MAP 6.7 NM 339 (400-3/4) 60 90 120 150 180 $1140-\overline{1}$ 1160-1 Knots 1160-11/2 1260-2 CIRCLING 4:28 437 (500-1) 557 (600-2) Min:Sec 6:42 3:21 2:41 2:14 457 (500-1) 457 (500-11/2)

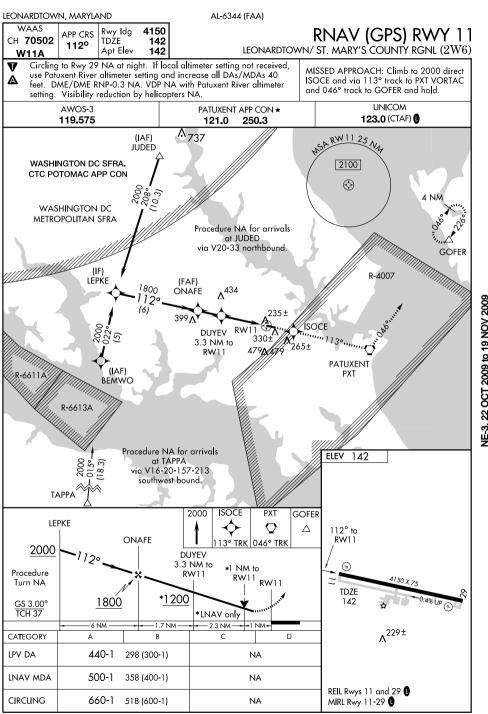


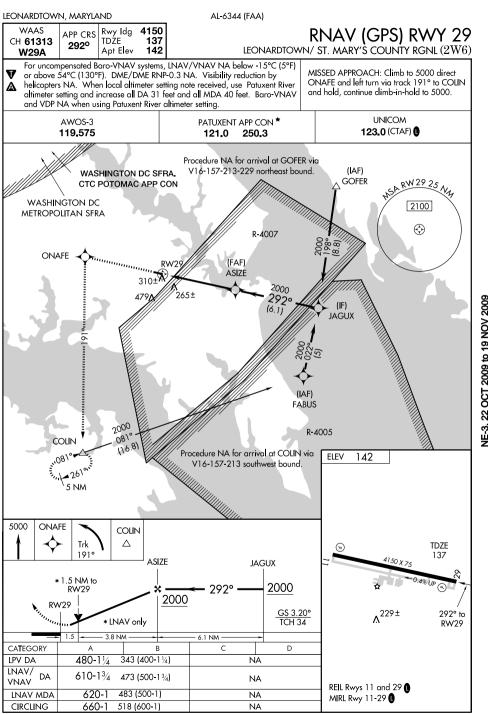


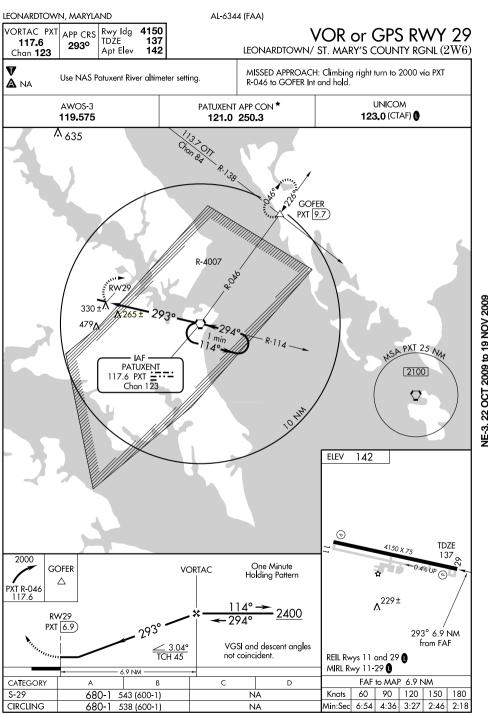






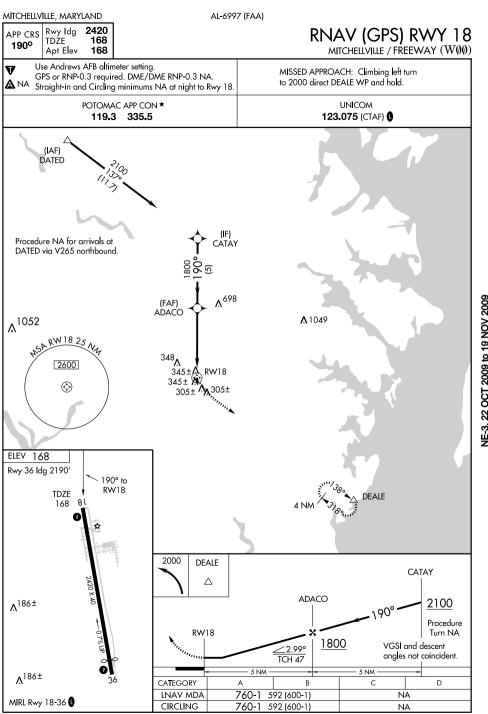


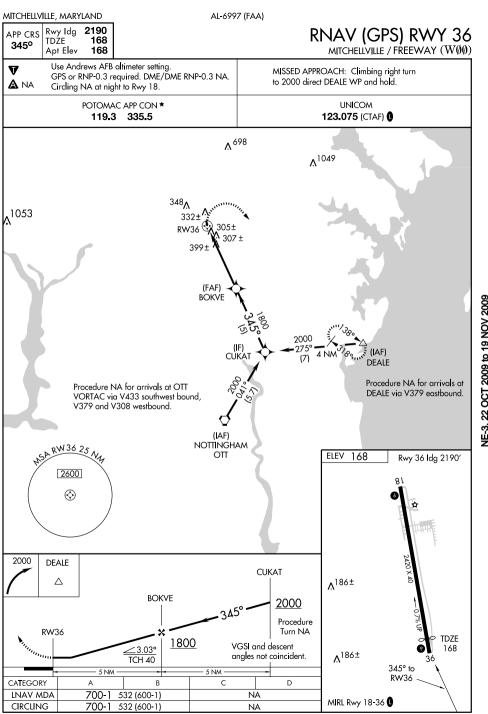


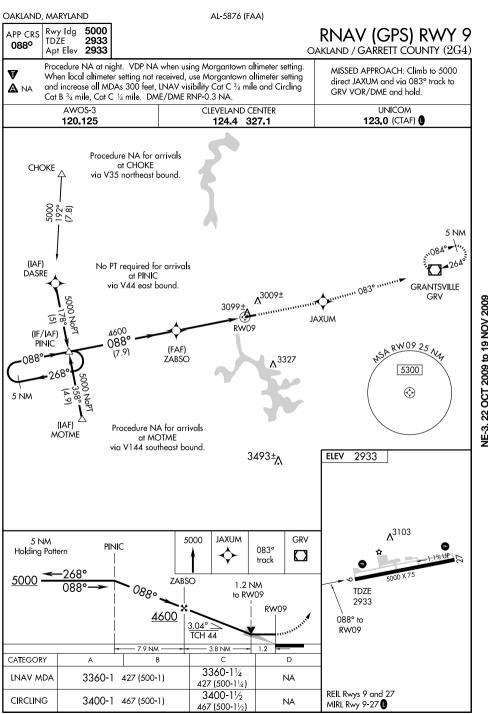


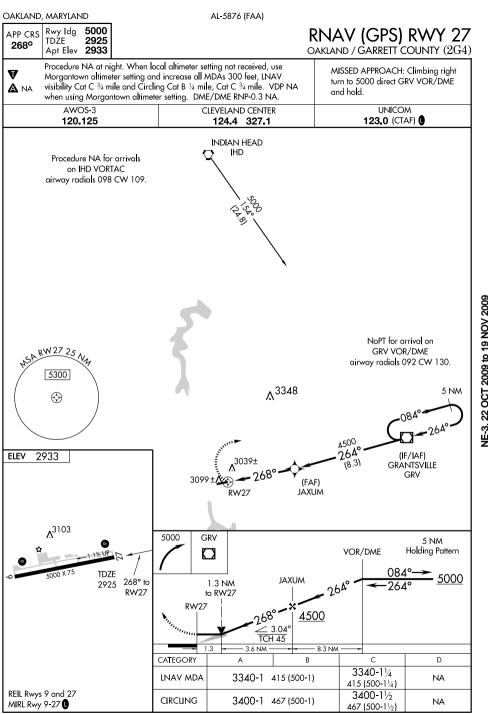
(IRONS.IRONS4) SI 443 (FAA) **IRONS FOUR ARRIVAL** WASHINGTON, DC 74-~ mmin (v POTOMAC APP CON WASHINGTON COLLEGE PARK 111.0 DCA =: --119.85 322.3 (DCA ARRIVALS ONLY) Linne// **FREEWAY** 128.35 270.275 (ADW ARRIVALS ONLY) Chan 47 ANDREWS AFB ATIS RONALD REAGAN 113.1 251.05 ANDREWS AFR WASHINGTON NATIONAL WASHINGTON NATIONAL ATIS R-10 \subseteq 132.65 R-289 SAMMO WASHINGTON EXECUTIVE/ N38°44.66′ W77°03.66′ HYDE FIELD POTOMAC AIRFIELD 8 NOTTINGHAM R-7.48 113.7 OTT NOTE: Aircraft use DCA ATIS to Chan 84 determine the direction **IRONS** of landing prior to IRONS N38°31.87' INT. (DCĂ only). OJAAY W77°06.37′ N38°17.56' W77°09.38′ TURBOJET VERTICAL NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA-AVOID-SURFACE **NAVIGATION PLANNING** TO 18,000 MSL. INFORMATION (DCA only) Expect to cross at 10,000 feet 48 (and expect 250 kts in a North operation). JIMBE N38°07.68′ W77°11.44′ (%) (21) **EPICS** N37°47.15' **HARCUM** W77°15.82' 108.8 HCM ::--FLAT ROCK Chan 25 113.3 FAK ::-: Chan 80 P.3/5 RICHMOND 114.1 RIC ::.: Chan 88 N37°30.14′ - W77°19.22′ L-34-36, H-10-12 NOTE: Chart not to scale. RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence.From over IRONS INT: Ronald Reagan Washington National Airport (DCA only): LANDING SOUTH: Then via DCA R-198 to SAMMÓ INT, heading for vectors to the final approach course. LANDING NORTH: Expect vectors to final approach course. All other airports: Expect vectors.

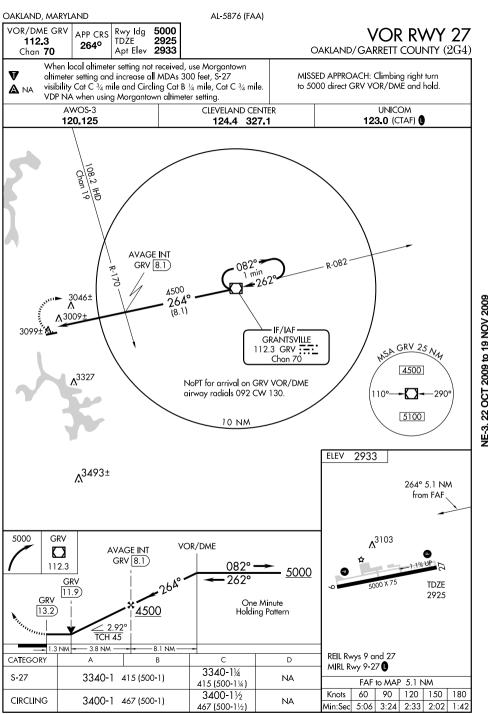
VE-3 22 OCT 2009 to 19 NOV 2009

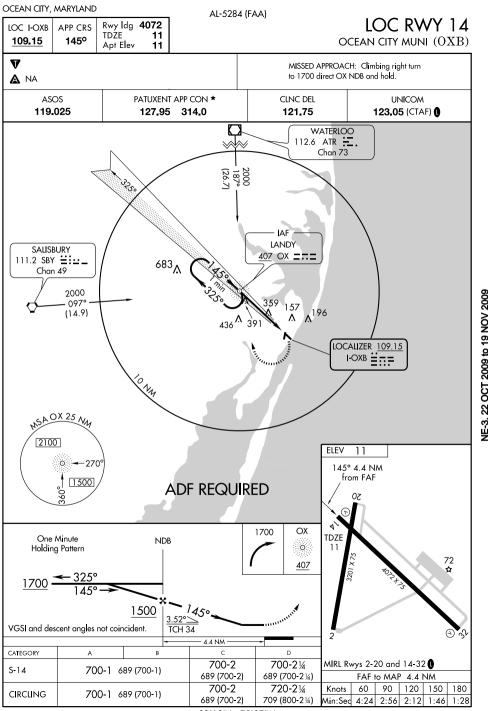


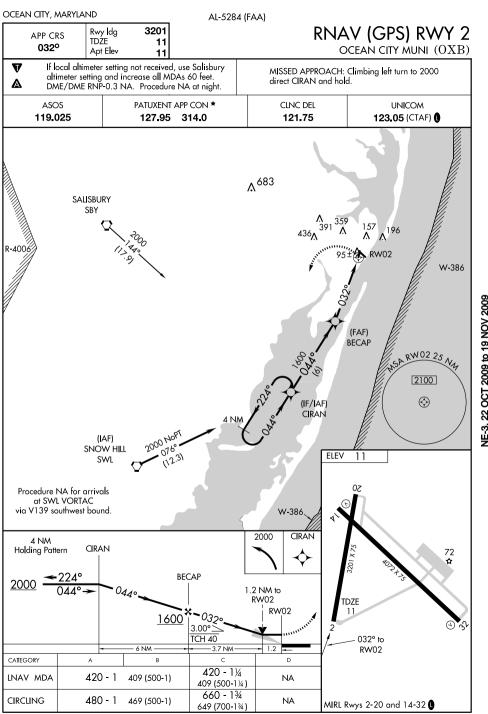


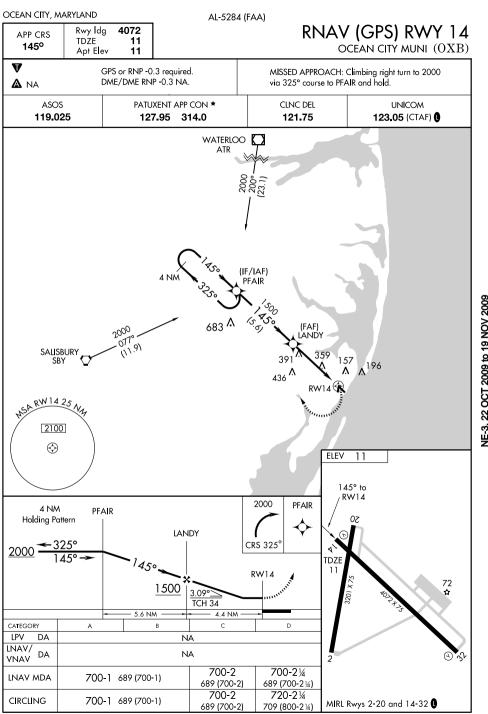


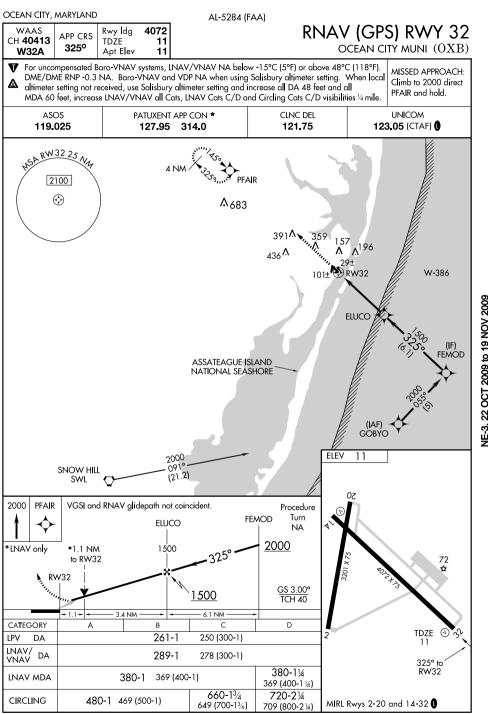


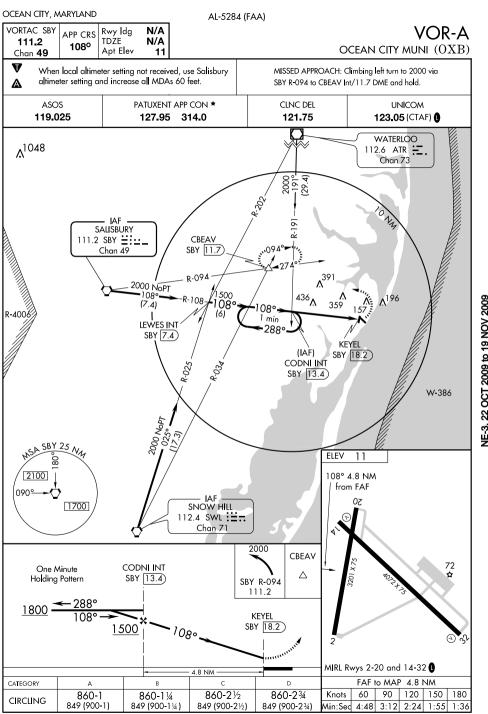


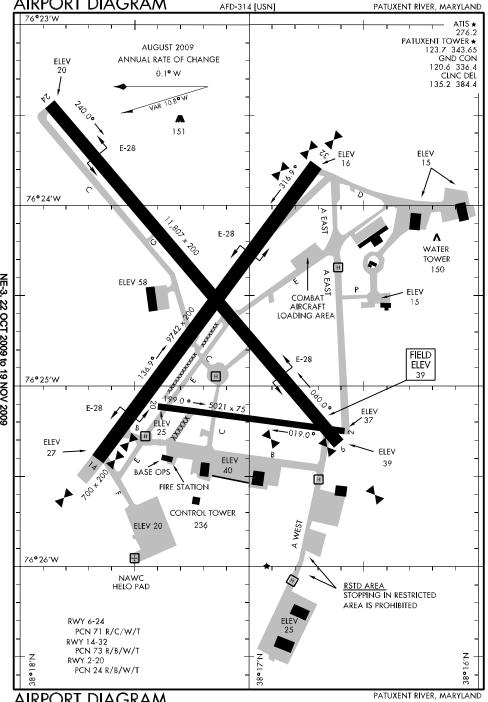


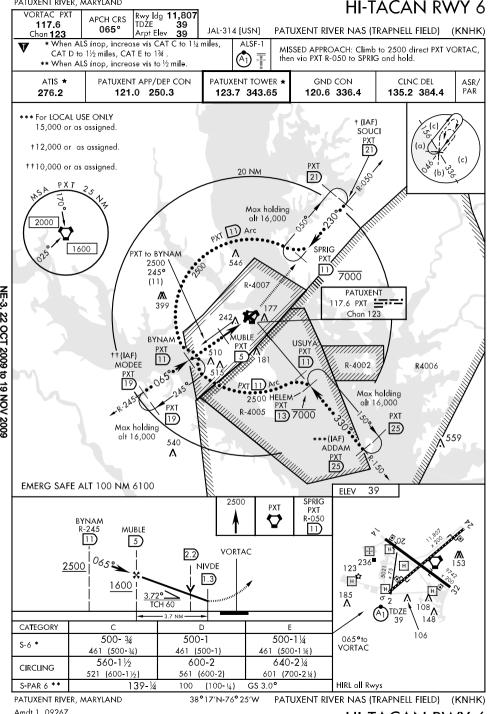


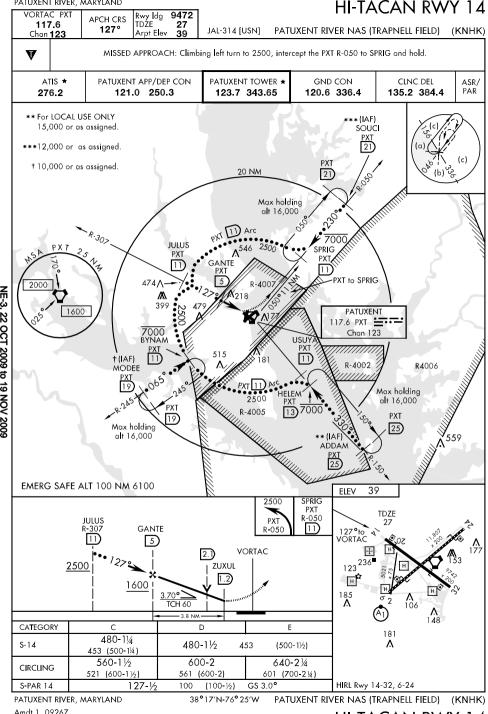


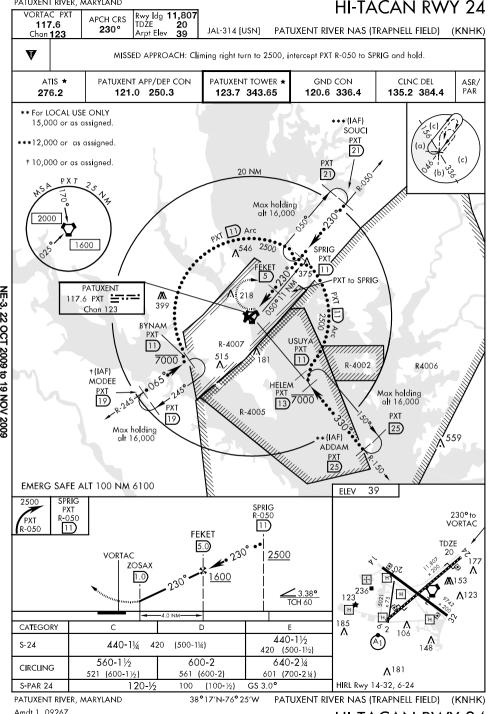


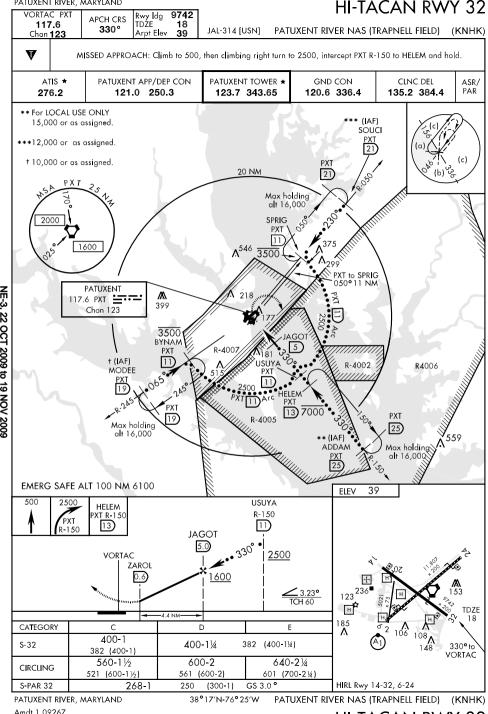


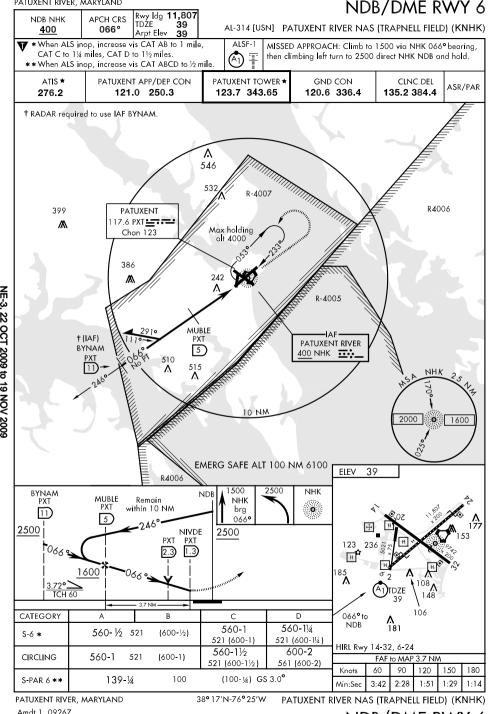


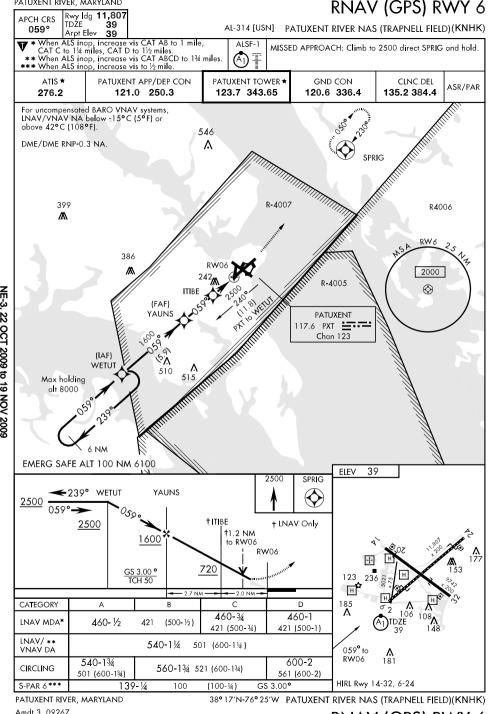


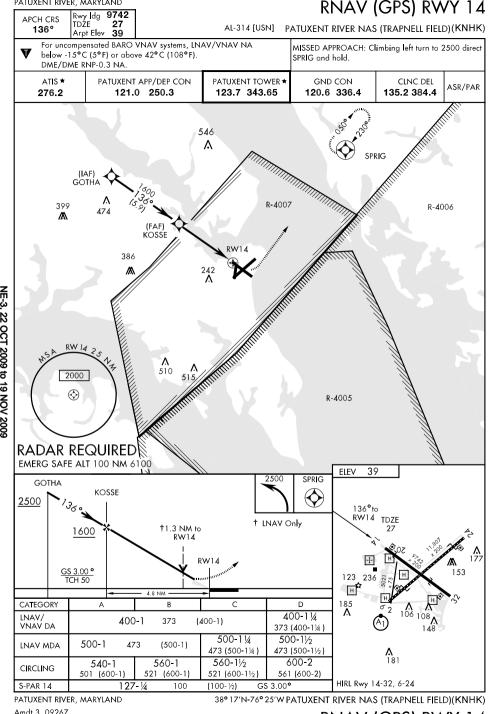


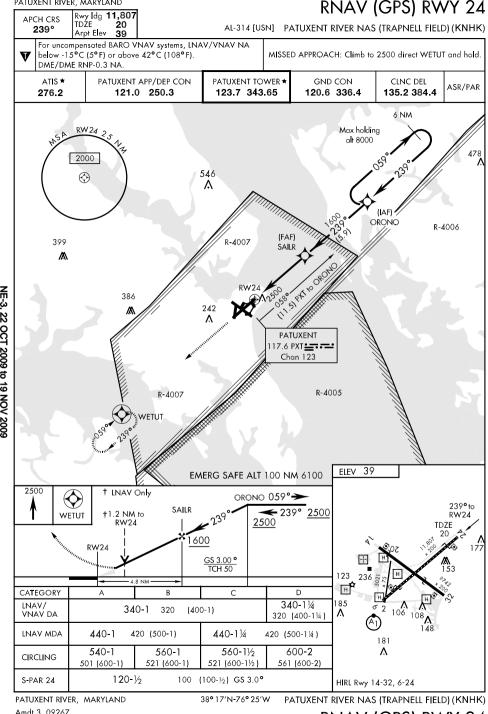


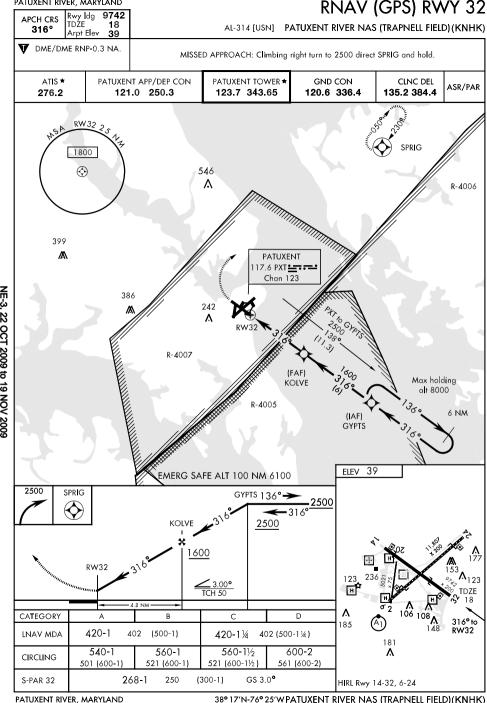


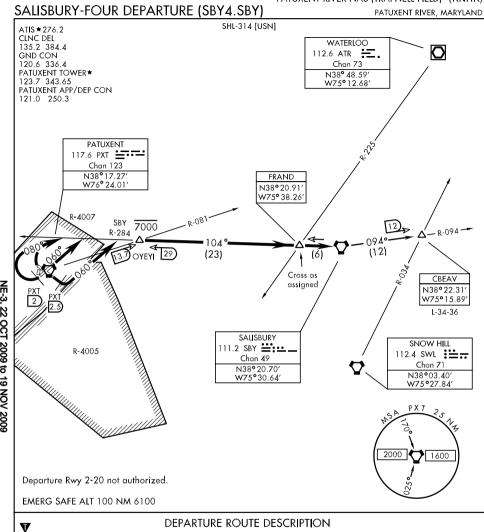












TAKE-OFF RWY 6: Climb to 6000 via heading 060°, thence...

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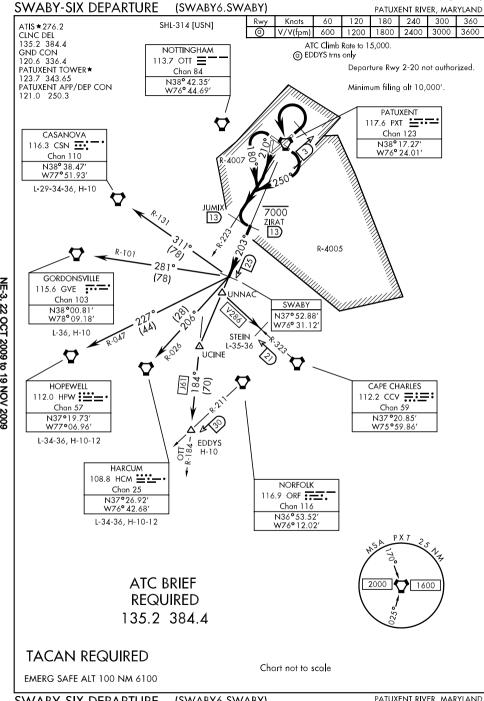
TAKE-OFF RWY 14: Climbing left turn to 6000 via heading 060° within PXT VORTAC 2.5 DME, thence...

TAKE-OFF RWY 24: Climb on heading 240° to PXT 2 DME, then climbing right turn to 6000 via heading 080°, thence...

TAKE-OFF RWY 32: Climbing right turn to 6000 via heading 080°, thence...

Intercept SBY VORTAC R-284, then via SBY R-284 to SBY. Cross FRAND as assigned. Then via assigned route or transition..

CBEAV TRANSITION (SBY4.CBEAV): Via SBY R-094 to CBEAV.



NE-3, 22 OCT 2009 to 19 NOV 2009

TAKEOFF RWY 6: Climb to 3000 via heading 060°, at PXT VORTAC 3 DME turn left direct PXT. thence. . .

TAKE-OFF RWY 14: Climbing right turn to 3000 via heading 250° within PXT 2.5 DME, intercept PXT R-223, thence. . .

TAKE-OFF RWY 24: Climbing left turn to 3000 via heading 210°, intercept PXT R-223, thence. . .

TAKE-OFF RWY 32: Climbing left turn to 3000 via heading 180°, intercept PXT R-223, thence

Via R-223 to JUMIX, PXT R-223/13 DME, then arc CCW SW of PXT via 13 mile arc to ZIRAT, PXT R-203/13 DME, then via PXT R-203 to SWABY, PXT R-203/25 DME, then via assigned transition or expect radar vectors to join assigned route. Cross ZIRAT at or below 7000.

R-184 to EDDYS. Cross SWABY at or above 15,000. GORDONSVILLE TRANSITION (SWABY6.GVE): Via GVE VORTAC R-101 to GVE.

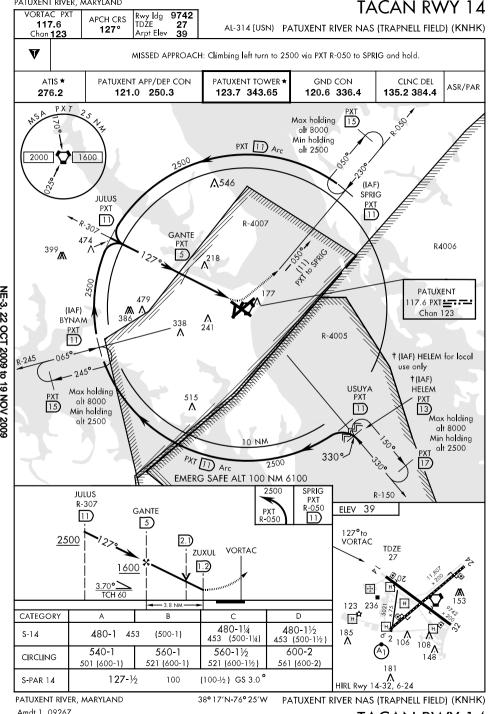
CASANOVA TRANSITION (SWABY6.CSN): Via CSN VORTAC R-131 to CSN. EDDYS TRANSITION (SWABY6.EDDYS): Via PXT R-203 to UCINE, then via OTT

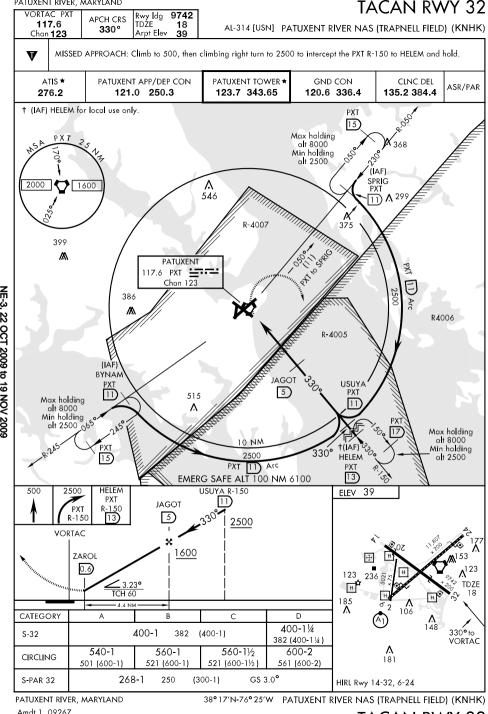
HARCUM TRANSITION (SWABY6.HCM): Via HCM VORTAC R-026 to HCM.

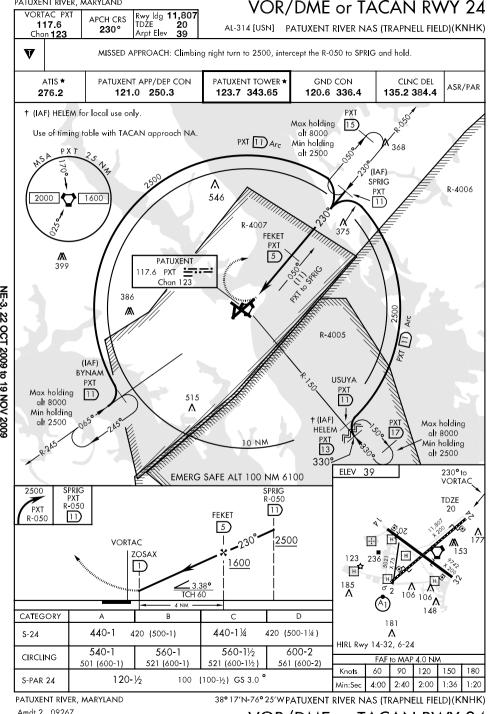
HOPEWELL TRANSITION (SWABY6.HPW): Via HPW VORTAC R-047 to HPW.

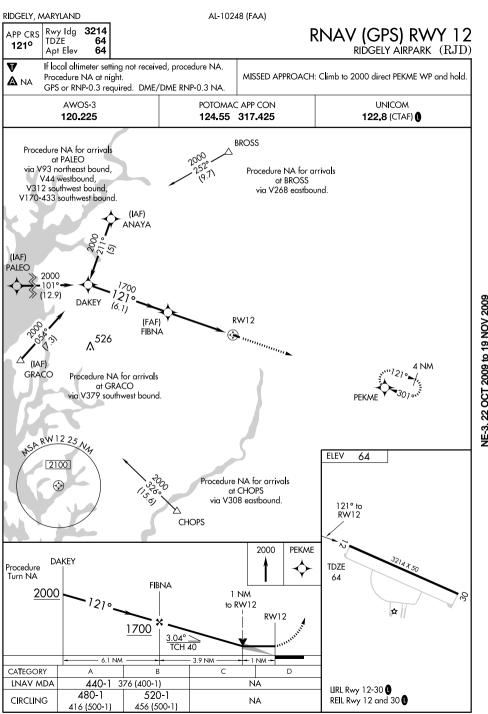
STEIN TRANSITION (SWABY6.STEIN): Via PXT R-203 to UNNAC, then via CCV VORTAC R-323 to STEIN.

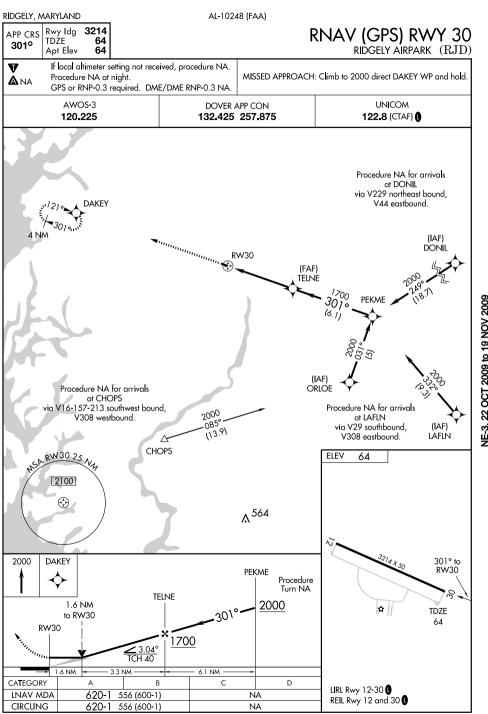
PATUXENT RIVER, MARYLAND TACAN RWY 6 VORTAC PXT Rwy ldg **11,807** TDZE **39** APCH CRS 117.6 065° AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK) Arpt Elev Chan 123 39 ALSF-1 * When ALS inop increase vis CAT AB to 1 mile, CAT C to 11/4 miles, CAT D to 11/2 miles. MISSED APPROACH: Climb to 2500 direct PXT VORTAC, then via R-050 to SPRIG and hold. (A_1) ** When ALS inop, increase vis CAT ABCD to 1/2 mile ATIS ★ PATUXENT APP/DEP CON PATUXENT TOWER * CLNC DEL GND CON ASR/PAR 123.7 343.65 135.2 384.4 121.0 250.3 120.6 336.4 276.2 PXT 150 **^** PXT DArc 15 2500 Max holding Λ^{546} alt 8000 A (IAF) Min holding 2000 1600 SPRIG alt 2500 368 Π ·IAF PATUXENT 117.6 PXT ----399 Chan 123 Μ R-4007 386 242 ۸۸ NE-3, 22 OCT 2009 to 19 NOV 2009 R-4005 PXT to BYNAM 245° 11 NM MUBLE R4006 (IAF) PXT BYNAM 5 PXT 11 **∆**510 Max holdina USUYA ^⁵¹⁵ Max holding alt 8000 0650 PXT Min holding alt 8000 Min holding alt 2500 alt 2500 10 NM PXT 17 † (IAF) 2500 15) HELEM Arc PXT 13) 39 **ELEV** EMERG SAFE ALT 100 NM 6100 † (IAF) HELEM for local use only SPRIG BYNAM PXT PXT R-245 PXT \Box ablaR-050 11 2500 MUBLE 0055 VORTAC 5 NIVDE 153 123 1.3 1600 TH² 3.72° 185 7. 106 TCH 60 Λ 108 3 7 NM TDZE 148 39 CATEGORY В D Α 181 500-34 500-1 065°to 500-1/2 S-6 * 461 (500-1/2) ۸ VORTAC 461 (500-34) 461 (500-1) 540-1 600-2 560-1 560-11/2 CIRCLING 501 (600-1) 521 (600-1) 561 (600-2) 521 (600-11/2) (100-1/4) GS 3.0° 139-1/4 100 HIRL Rwy 14-32, 6-24 S-PAR 6 ** PATUXENT RIVER, MARYLAND 38° 17'N-76° 25'W PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)





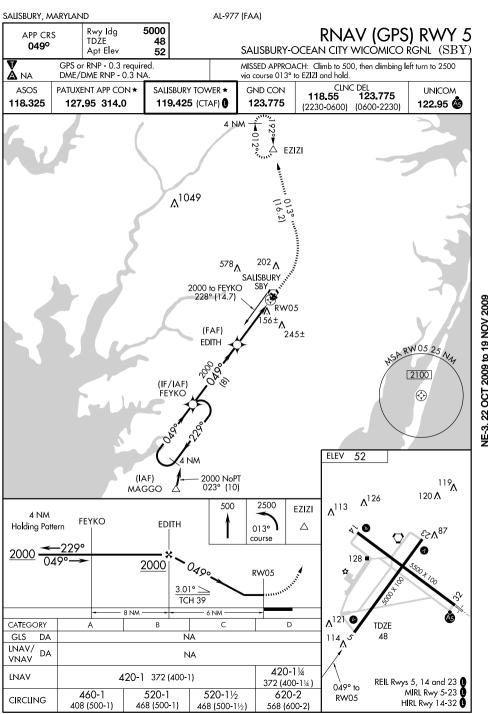


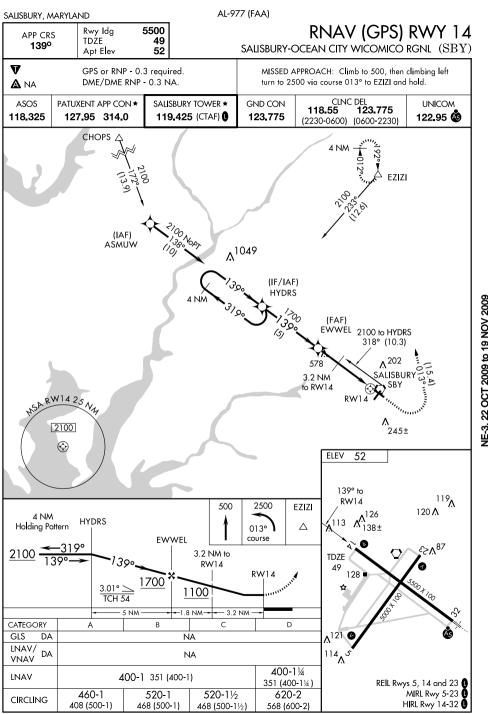


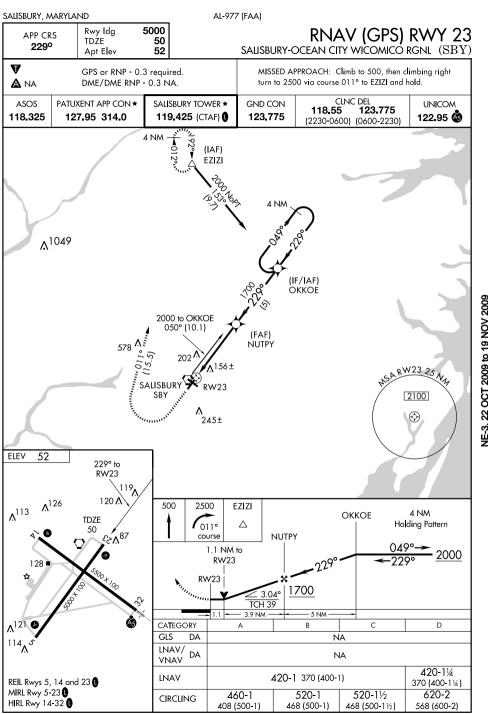


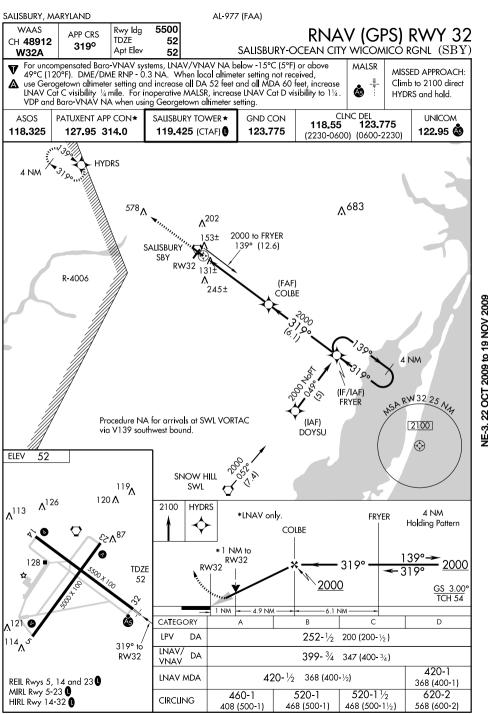
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY) **AIRPORT DIAGRAM** SALISBURY, MARYLAND AL-977 (FAA) SALISBURY TOWER * 119.425 GND CON 123.775 CLNC DEL 118.55 (2230-0600) 123.775 (0600-2230) - 38°21.0′N -JANUARY 2005 **ELEV** ANNUAL RATE OF CHANGE 46 0.0° E ح٤ ELEV 50 **TERMINAL** NE-3 22 OCT 2009 to 19 NOV 2009 CONTROL TOWER 128 -5500+100 38°20.5'N -FIRE STATION 2000 **FIELD ELEV** 52 **GENERAL** AVIATION PARKING RWY 5-23 S30, D65, ST83 RWY 14-32 048.5 S34, D115, ST146 ELEV 45 - 38°20.0'N · CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED. 75°30.5′W 75°31.0′W

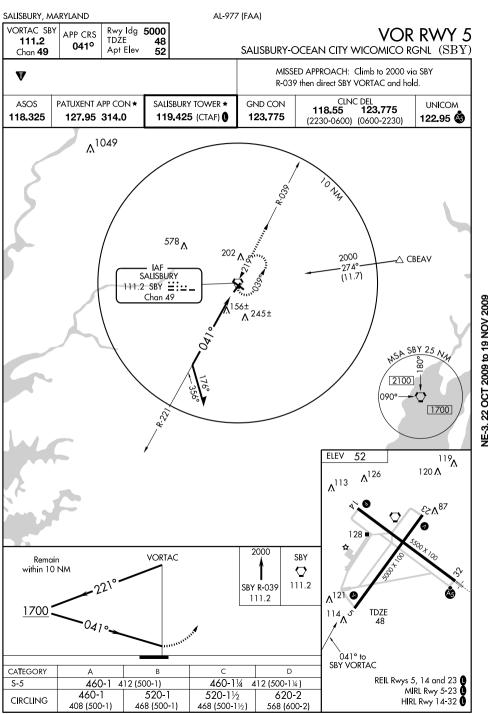
22 OCT 2009 to 19 NOV 2009

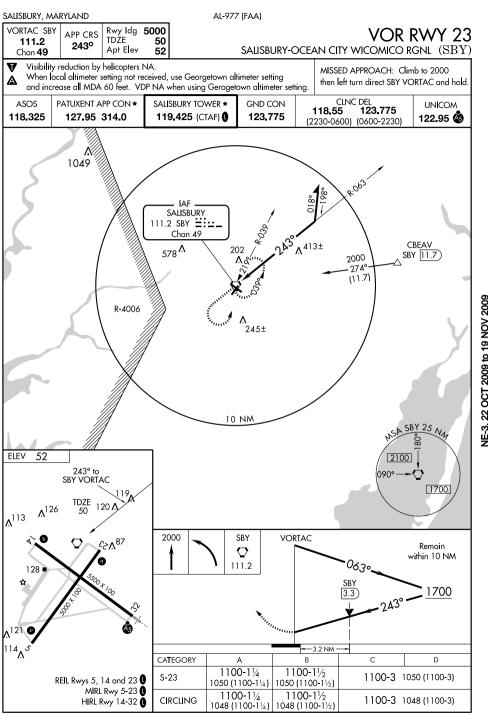


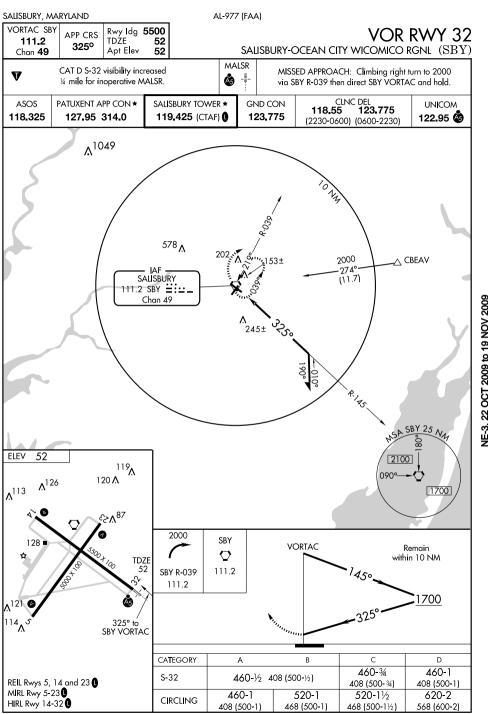






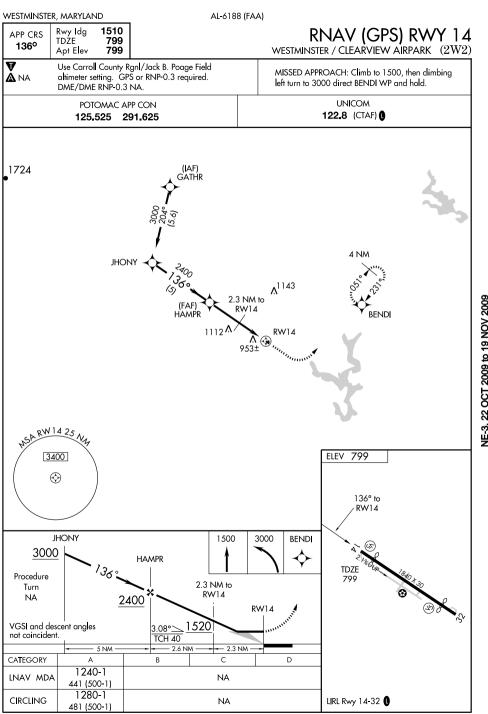


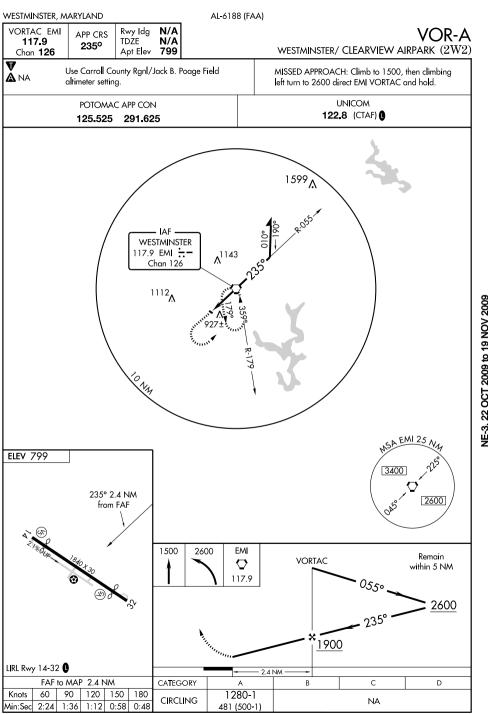




STEVENSVILLE, MARYLAND AL-9148 (FAA) Rwy Idg RNAV (GPS) RWY 11 APP CRS TDŹE 15 129° STEVENSVILLE/BAY BRIDGE (W29) Apt Elev 15 V Obtain local altimeter setting on CTAF; when not received, MISSED APPROACH: Climb to 1500 use Easton/Newnam Field altimeter setting. A NA direct PUNKN WP and hold. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. AWOS-3 POTOMAC APP CON UNICOM 120.575 119.0 282.275 123.0 (CTAF) 0 (IF/IAF) GEEMO 1600 (FAF) DOCTR 1049 ∧ 2.2 NM to RW11 NE-3 22 OCT 2009 to 19 NOV 2009 150± 162 **∧** 429 RW 1125 Ny 2600 ELEV 15 Rwy 29 ldg 2713' **GEEMO** 1500 **PUNKN** 2200 129° to 129° **DOCTR** VGSI and descent angles RW11 not coincident. 2.2 NM #Descent angle NA with to RW11 ^40± 1600 Easton/Newnam Field RW11 altimeter setting. (2) *900 when using 2903 X 60 Easton/Newnam #3.49°\ Procedure Turn *8<u>40</u> 31± Field altimeter setting. TCH 38 **TDZE** NA 15 5.1 NM 2 NM CATEGORY D LNAV MDA 400-1 385 (400-1) NA 460-1 480-1 CIRCLING NA 445 (500-1) 465 (500-1) EASTON/NEWNAM FIELD ALTIMETER SETTING MINIMUMS LNAV MDA 460-1 445 (500-1) NA REIL Rwys 11 and 29 (**CIRCLING** NA MIRL Rwy 11-29 1 500-1 485 (500-1)

STEVENSVILLE, MARYLAND AL-9148 (FAA) Rwy Ida RNAV (GPS) RWY 29 APP CRS TDŹE 15 294° STEVENSVILLE/BAY BRIDGE (W29) 15 Apt Elev V Obtain local altimeter setting on CTAF; when not received, MISSED APPROACH: Climbing right turn use Easton/Newnam Field altimeter setting minimums. to 2100 direct ZAKLY WP and hold. A NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. AWOS-3 UNICOM POTOMAC APP CON 120.575 119.0 282.275 123.0 (CTAF) 0 (IAF) AGARD ∆⁴¹⁰ ۸⁷⁰⁶ .<u>.</u>∆117± ۸ ₆₅₄ 429 371 RW29 4 NM 1600 VE-3 22 OCT 2009 to 19 NOV 2009 2.5 NM (FAF) to RW29 AZLOM (IAF) ZAKLY SARW 29 25 Ny 2600 (IAF) HUNNE **(** ELEV 15 Rwy 29 ldg 2713' 2100 ZAKLY 4 NM ZAKLY Holding Pattern AZLOM 2100 29^{4°} 2.5 NM ∆^{40±} to RW29 **TDZE** <u>1</u>600 RW29 * Descent angle NA with 2903 X 60 15 Easton/Newnam Field *****2.91° 31± 820 altimeter setting. TCH 39 ۸ - 2.5 -2.5 NM - 5 NM CATEGORY D LNAV MDA NA 380-1 365 (400-1) 294° to RW29 460-1 480-1 CIRCLING NA 445 (500-1) 465 (500-1) EASTON/NEWNAM FIELD ALTIMETER SETTING MINIMUMS LNAV MDA 420-1 405 (500-1) NA REIL Rwys 11 and 29 (CIRCLING NA 500-1 485 (500-1) MIRL Rwy 11-29 0



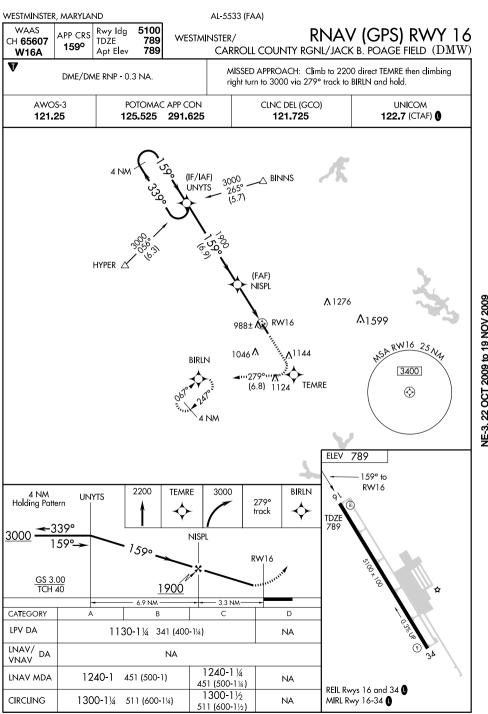


(OTT.OTT6) 08101 ST-804 (FAA) NOTTINGHAM SIX ARRIVAL BALTIMORE, MARYLAND CARROLL COUNTY 6 POTOMAC APP CON MARTIN STATE 6 RGNI 128.35 270.275 BALTIMORE/ C **BALTIMORE ATIS** BAITIMORE WASHINGTON INTL 1151 115.1 BAL :=: THURGOOD MARSHALL Chan 98 ARMFI **DEALE** 113.5 AML :-. RIPKN N38°47 87' N38° 55.90′ Chan 82 W76°32.01′ W76° 34.05′ VERTICAL NAVIGATION PLANNING INFORMATION CASANOVA Expect to cross RAVNN 1900 at 6000'. N38° 48.27' 071° Chan 110 W76° 31.08′ R-276 (11) N38°38.47′-W77°51.93′ 096° L-29-34-36, H-10-12 NOTTINGHAM 5500 VERTICAL NAVIGATION (30) 091° 113.7 OTT = PLANNING Chan 84 (23) INFORMATION N38°42.35′-W76°44.68′ Expect to cross at FL 190. SACCO VERTICAL NAVIGATION N38°40.23' PLANNING INFORMATION W77°22.90′ Expect to cross at VERTICAL NAVIGATION or below 9000'. PLANNING INFORMATION B-084 Expect to cross SABB 23 N38°22.91′ W77°08.25′ at 16,000'. **BROOKE** VERTICAL NAVIGATION 18/ 114.5 BRV PLANNING INFORMATION Chan 92 Expect to cross at 15,000'. N38°20.18′-W77°21.17′ **PEGBY** VERTICAL NAVIGATION A N38° 04.72′ W77° 12.06′ PLANNING INFORMATION NOTE: Expect to cross at 15,000' All part 91, 101, 103, 105, **OGATE** and 280 Kts. 125, 133, 135 and 137 flight N38° 03.48′ W77° 31.07′ operations are prohibited on the NOTE: CASANOVA TRANSITION. This STAR applicable to turbojet aircraft only. RICHMOND 114.1 RIC :-. FLAT ROCK 113.3 FAK _____ Chan 88 N37°30.14′-W77°19.22′ N37°31.71′-W77°49.69′ L-34-36, H-10-12 L-36, H-10-12 NOTE: Chart not to scale. ARRIVAL ROUTE DESCRIPTION CASANOVA TRANSITION (CSN.OTT6): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Thence FLAT ROCK TRANSITION (FAK.OTT6): From over FAK VORTAC via FAK R-031 and BRV R-214 to BRV VORTAC, then via OTT R-242 to OTT VORTAC. Thence. RICHMOND TRANSITION (RIC.OTT6): From over RIC VORTAC via RIC R-018 to SABBI INT, then via OTT R-234 to OTT VORTAC. Thence From over OTT VORTAC via OTT R-071 to RAVNN INT, then via

BAL R-174 to RIPKN INT. Expect radar vectors to final approach course

after passing RIPKN INT.

22 OCT 2009 to 19 NOV 2009



WESTMINSTER, MARYLAND AL-5533 (FAA) 5100 Rwy Idg RNAV (GPS) RWY 34 APP CRS TDŹE 788 339° WESTMINSTER/CARROLL COUNTY RGNL/JACK B. POAGE FIELD (DMW) Apt Elev 789 V GPS or RNP - 0.3 required. MISSED APPROACH: Climbing leftt turn DME/DME RNP - 0.3 NA. to 3000 direct BIRLN WP and hold. **A** NA AWOS-3 POTOMAC APP CON CLNC DEL (GCO) UNICOM 121.725 121.25 122.7 (CTAF) 0 125.525 291.625 NSA RW34 25 NZ RADAR REQUIRED 3400 \Diamond 1276 _∆1599 RW34 BIRLN (FAF) **KATHH** 2 NM 1124 to RW34 VE-3 22 OCT 2009 to 19 NOV 2009 4 NM (IF/IAF) **FOUST** WASHINGTON DC

TO ITAN SFRA ELEV 789 3000 **BIRLN FOUST** KATHH 2 NM to RW34 2500 1.1 NM to RW34 RW34 2100 ≤2.98° 1460 **TDZE** TCH 46 788 - 0.9 -2 NM -5 NM -CATEGORY D В 339° to RW34 1160 - 1 372 (400-1) LNAV MDA NA REIL Rwys 16 and 34 1 1240 - 11/2 CIRCLING 1240 - 1 451 (500-1) NA MIRL Rwy 16-34 (451 (500-11/2)

